

Thank you, Randy. Good afternoon and welcome to the webinar. This Informational Webinar is for people interested in applying to the Department of Energy's Funding Opportunity Announcement (or FOA), which was issued September 2, 2015, entitled **Deployment of Clean Energy and Energy Efficiency Projects on Indian Lands – 2015.**

As Randy said, my name is Lizana Pierce and I am a Senior Engineer with the Department of Energy and a Program Manager under the Office of Indian Energy Policy and Programs (otherwise known simple as Office of Indian Energy). I have been working in clean energy for the last 20 years and specifically in Indian Energy since the late 90's. Under the Office of Indian Energy, I am tasked with implementing the deployment program – specifically for financial assistance that entails issuing funding opportunity announcements, managing the application review process, administering the resultant grants, and overseeing the funded tribal energy projects. I will be presenting today, along with Dan Olis and Caleb Rockenbaugh from DOE's National Renewable Energy Laboratory (NREL).

The intent of this webinar is to cover the basic aspects of the Funding Opportunity Announcement and highlight essential details about the application process, including:

- The types of applications sought;
- Who is eligible to apply;
- Cost share and other requirements;

- What the application needs to contain;
- How to ask questions; and
- How applications will be selected for funding.

Before we begin, I'd like to draw your attention to the email address on the lower right hand side of this cover page. This is the official mailbox to direct all of your questions to during the entire FOA process. Please do not contact DOE or NREL staff directly with questions, including myself, as all questions must be in writing. The reason for only accepting questions in writing is to ensure you receive a formal response and so that everyone has the benefit of the response - because if you have a question, other potential applicants may also have that same question.

As we will not have a live Q&A session as part of this webinar, please capture your questions as they come up and send them via email to tribal@ee.doe.gov. In the subject line of your email, please include the FOA number, DE-FOA-0001390. Responses to all questions received at this mailbox will be posted to the Frequently Ask Questions (FAQs) webpage for this FOA on the EERE Exchange website, unless a similar question has already been asked. Responses to your questions will typically be posted within 3 business days after receipt. Before submitting a question, please check the FAQs webpage on the EERE Exchange website to see if a similar question has already been answered. In submitting a question, please be careful not to include any language that might be business sensitive, proprietary or confidential.

Your participation in this webinar is completely voluntary. There are no particular advantages or disadvantages to the Application evaluation process with respect to your participation in the webinar today. These slides and an audio recording of this webinar will be posted in the next week or so. As a registrant of the webinar, you'll be notified when this material is available.

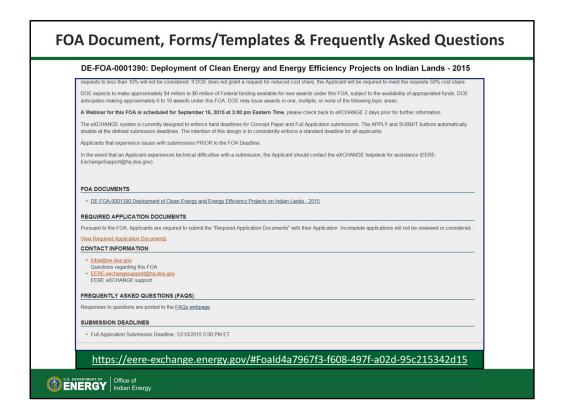
So, let's get started!

D	E-FOA-0001390: Deployment of Clean Energy and Energy Efficiency Projects on Indian Lands - 2015
(ir	rough this Funding Opportunity Announcement (FOA), the Department's Office of Indian Energy is soliciting applications from Indian tribes cluding Alaska Native regional corporations, village corporations, tribal consortia, and tribal organizations) and Tribal Energy Resource evelopment Organizations to install (1) facility-scale clean energy and energy efficiency projects and (2) community-scale clean energy ejects on Indian lands:
T	e Funding Opportunity Announcement is soliciting applications under two Topic Areas:
In	stall clean energy and energy efficiency retrofit projects for tribal buildings (Topic Area 1);
C	ean Energy Systems (Topic Area 1.a.)
D	eep Energy Retrofit* Energy Efficiency Measures (Topic Area 1.b.)
A	nd,
D	eploy clean energy systems on a community-scale (Topic Area 2).
U	nder Topic Area 1, DOE is seeking applications for the deployment of facility-scale:
(a	clean energy systems (renewable energy power systems or combined heat and power systems) to displace electrical, heating and/or cooling loads by at least 15%; and
(b	deep energy retrofit energy efficiency measures to reduce the total of all energy used in a building or buildings by at least a 20%.
	nder Topic Area 2, DOE is soliciting applications for the deployment of community-scale clean energy systems of 50 kW or more (or for healing or cooling the Bitu equivalent of 0,807 Bitu/hour) on Indian lands to provide electricity, and/or healing or cooling for many buildings or to an entire tribal community.
ap	nder this FOA, a 50% cost share of total project costs (100% match against DOE funds) is required, unless an Applicant requests a reduction in the cost share as part of the plication and receives approval from DOE. Applicants may request up to a 40% reduction in cost share, to no less than 10% of the total project costs. Cost share reduction quests to less than 10% will not be considered. If DOE does not grant a request for reduced cost share, the Applicant will be required, must be required before cost share.
	DE expects to make approximately \$4 million to \$6 million of Federal funding available for new awards under this FOA, subject to the availability of appropriated funds. DOE ticipates making approximately 6 to 10 awards under this FOA. DOE may issue awards in one, multiple, or none of the following topic areas.
A	Webinar for this FOA is scheduled for September 16, 2015 at 3:00 pm Eastern Time, please check back to eXCHANGE 2 days prior for further information.
	e eXCHANCE system is currently designed to enforce hard deadlines for Concept Paper and Full Application submissions. The APPLY and SUBMIT buttons automatically sable at the defined submission deadlines. The intention of this design is to consistently enforce a standard deadline for all applicants.
A	plicants that experience issues with submissions PRIOR to the FOA Deadline:
	the event that an Applicant experiences technical difficulties with a submission, the Applicant should contact the eXCHANGE helpdesk for assistance (EERE-

Before we discuss the Funding opportunity Announcement itself, I wanted to walk you through the EERE Exchange site and where you can find the FOA document itself, application forms and templates including the Excel Energy_Saved_Template for Topic Area 1 Only, and Frequently Asked Questions (FAQs). The EERE Exchange website is at www.eere-exchange.energy.gov/.

Once on that page, scroll down the list until you locate this FOA number — DE-FOA-0001390. Clicking the FOA number will take you to the section of the webpage specific to this FOA as shown on the slide. As you can see in this slide of the EERE Exchange website, the section specific to this FOA (DE-FOA-0001390) includes a brief summary and other key information.

Pause.



As you can see from this screen shot, the EERE Exchange section for this FOA also includes the FOA document itself, application documents, contact information for submitting questions or EERE Exchange support, a link to the FAQs webpage, and the submission deadline (December 10, 2015 at 5:00 pm Eastern Time).

Pause.

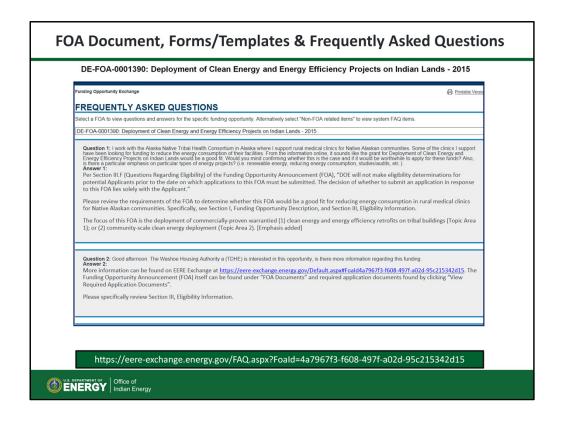
Specifically when you click on "View Required Application Documents" under Required Application Documents you'll find application forms and templates.

DE-FOA-0001390: Deployment of Clean Energy and Energy Efficiency Projects on Indian Lands - 2015		
OA DOCUMENTS		
DE-FOA-0001390 Deployment of Clean Energy 8	and Energy Efficiency Projects on Indian Lands - 2015	
EQUIRED APPLICATION DOCUMENTS		
ursuant to the FOA, Applicants are required to subm	nit the "Required Application Documents" with their Application. Incomplete applications will not be reviewed or considered.	
ull Application		
SF-424 EERE_159_Budget_Justification		
Summary Slide Template		
SF-LLL Energy Saved Template Topic Area 1 Only		
lide Required Application Documents		
ONTACT INFORMATION		
tribal@ee.doe.gov		
Questions regarding this FOA • EERE-exchangesupport@hq.doe.gov		
EERE eXCHANGE support		
REQUENTLY ASKED QUESTIONS (FAQS)		
esponses to questions are posted to the FAQs webp	page.	
UBMISSION DEADLINES		
Full Application Submission Deadline: 12/10/2015	5 5.00 PM ET	
	energy.gov/#Foald4a7967f3-f608-497f-a02d-95c215342d15	

As you can see, once you click on "View Required Application Documents" under Required Application Documents you see the various forms and templates needed as part of an application. These include:

- 1) Application for Federal Assistance (SF-424)
- 2) Budget Justification (EERE 335)
- 3) Summary slide template (PowerPoint)
- 4) Disclosure of Lobbying Activities (SF-LLL)
- 5) And, for Topic Area 1 only, the "Energy Saved Template" which we will demonstrated at the end of the presentation.

All other components of the application are self-generated. For a complete list of the application content, see the table beginning on page 24 of the FOA document.



The answers to all FOA related questions received in our email box (tribal@ee.doe.gov) will be posted on the Frequently Asked Questions (FAQs) webpage specific to this FOA on the EERE Exchange website. This slide shows a portion of the FAQ webpage and at the bottom the URL for the webpage.

You may wish to check this page periodically as questions and answers will continue to be posted throughout the entire time the FOA is open.

FOA Issue Date:	September 2, 2015
Informational Webinar:	September 16, 2015 at 3:00 pm Eastern Time
Submission Deadline for Applications:	December 10, 2015 at 5:00 pm Eastern Time
Expected Date for DOE Selection Notifications:	March 2016
Expected Timeframe for Award Negotiations	90 days after receipt of any requested supplemental information

This slide shows the anticipated schedule for the FOA which is also on page 1 of the Funding Opportunity Announcement (FOA) document. The FOA has already been posted, and we are conducting the FOA Informational Webinar now. Please note that all Applications are due on the EERE Exchange website no later than 5:00 Eastern on December 10, 2015. Note that the closing time is 5:00 Eastern so that help desk assistance and support will be available to you up until the closing time. Please plan accordingly to meet that 5:00 Eastern deadline.

Please note that DOE will not extend the submission deadline for Applicants that fail to submit required information due to server/connection congestion. Also, EERE Exchange is designed to enforce the deadlines specified in this FOA. The "Apply" and "Submit" buttons will automatically disable at the defined submission deadline. Therefore, please ensure you begin uploading you application at least 48 hours in advance of the submission deadline to ensure you meet that deadline, and allow at least 1 hour to submit an Application. Once the Application is submitted in EERE Exchange, you may revise or update your Application until the expiration of the deadline.

DOE anticipates notifying Applicants selected for negotiation of award on or about March 2016 and making awards approximately 90 days after receipt of any requested supplemental information.

Each and every Applicant will received a notification letter by email to the technical and administrative points of contact designated by the Applicant in EERE Exchange. Notification letters will state whether the Application is determined to be:

- Non-compliant (an incomplete or late Application),
- Ineligible,
- Nonresponsive (see page 11 of the FOA for Applications specifically <u>not</u> of interest),
- Not selected for funding,
- A selection is postponed,
- Not selected, but designated as an alternate, or
- Selected for negotiation towards an award.

The notification letter will state the basis upon which those decisions were made.

EERE Exchange Registration

- To apply to this FOA, Applicants <u>must</u> register with and submit Application materials through EERE Exchange at https://eere-Exchange.energy.gov, EERE's online Application portal.
- Frequently asked questions for this FOA and the EERE Application process can be found at https://eereexchange.energy.gov/FAQ.aspx.
- Register in Grants.gov (http://www.grants.gov) to receive automatic updates when Amendments to this FOA are posted. However, please note Applications will not be accepted through Grants.gov.



READ SLIDE

Other Registration Requirements

- The EERE Exchange registration does not have a delay; however, the remaining registration requirements could take several weeks to process and are necessary for a potential Applicant to receive an award under this FOA.
- Although not required in order to submit an Application through the EERE Exchange site, all potential Applicants lacking a DUNS number, or not yet registered with SAM or FedConnect should complete those registrations as soon as possible.
- Please see Part VI.B of the FOA (pages 52-53) for information on how to register in the above systems.



READ SLIDE

Notice

- All applicants are strongly encouraged to carefully read the Funding Opportunity Announcement DE-FOA-0001390 ("FOA") and adhere to the stated submission requirements.
- This presentation summarizes the contents of FOA. However, if there are any inconsistencies between the FOA and this presentation or statements from DOE personnel, the FOA is the controlling document and applicants should rely on the FOA language or seek clarification from DOE.
- If you believe there is an inconsistency, please contact us by sending an email to tribal@ee.doe.gov.



READ SLIDE

Agenda

- 1) FOA Executive Summary
- 2) FOA Description
- 3) Topic Areas
- 4) Non-responsive Applications
- 5) Award Information
- 6) Applicant Eligibility
- 7) Cost Sharing
- 8) Content and Form of Applications
- 9) Application Eligibility
- 10) Merit Review and Selection Criteria and Process
- 11) Registration Requirements
- 12) Application Submission and Points-of-Contact
- 13) Questions
- 14) Energy Savings Calculation (Topic Area 1 Only)
- 15) Energy Savings Template Demonstration (Topic Area 1 Only)
- 16) Closing



The agenda for this presentation is as shown.

We'll go over the:

- (1) FOA description including Topic Areas,
- (2) Applications <u>not</u> of interest,
- (3) General award information,
- (4) Applicant eligibility,
- (5) Cost sharing, including how to request a reduction in cost share,
- (6) The content and form of the application,
- (7) The merit review and selection criteria and process.

We'll also address registration requirements and how to submit an application, and how to submit questions to this FOA. Remember, we will not entertain questions as part of this webinar. All questions must be submitted via email to tribal@ee.doe.gov. So, please capture any questions you have that arise during the webinar, and send those by email to tribal@ee.doe.gov.

Additionally, we will also cover how energy savings must be calculated for Topic Area 1 only, and provide a demonstration of the energy savings template provided for calculating

the energy savings under Topic Area 1. Note that energy savings calculations are **only** required under Topic Area 1. **No energy calculations are needed for Topic Area 2.**

We encourage you to have a copy of the FOA in front of you for reference as we go through the presentation. The FOA document itself can be found by searching the internet for EERE Exchange and once on the EERE Exchange website, scrolling down and clicking on the specific FOA number (DE-FOA-0001390). This will take you to all the FOA information, including a hyper-link directly to the FOA document itself.

If you'd like to follow along using the FOA document itself, this presentation generally follows the same sequence.

FOA Summary	Under this FOA, DOE is soliciting applications from Indian Tribes (includi Alaska Native regional corporations and village corporations) and Tribal Energy Resource Development Organizations to: (1) install clean energy and energy efficiency retrofits projects for tribal buildings; and (2) to deploy clean energy systems on a community-scale on Indian Lands (see Section III.A for eligibility definitions).
Total Amount to be Awarded	Approximately \$4 million to \$6 million in Federal funds.
Average Award Amount	DOE anticipates making awards that range from \$50,000 to \$500,000 fo Topic Area 1 (Tribal Building Clean Energy and Energy Efficiency Retrofits and from \$250,000 to \$1,000,000 for Topic Area 2 (Community-Scale Clean Energy Deployment).
Types of Funding Agreements	Grants
Period of Performance	1 to 2 years, but no longer than 3 years (including the energy savings verification period for Topic Area 1).

The FOA Executive Summary included on page 1 of the FOA document includes key information on the FOA. This information is summarized on this and the next two slides. We will go over this information as part of the presentation, but is provide here as a summary.

I'll give you a moment to read through the slide.

PAUSE.

Eligible Applicants	Subject to the definitions and requirements in Section III.A, eligible entities include: (1) Indian Tribes (including Alaska Native regional corporations and village corporations) or (2) Tribal Energy Resource Development Organizations. Applications from a consortium of Indian
	Tribes (Tribal Consortium) will be accepted but <u>must</u> be submitted by a single Indian Tribe acting as the Applicant representing the Consortium. Applications may also be submitted on behalf of an Indian Tribe(s) by an authorized Tribal Organization or Inter-tribal Organization, provided evidence of that authority is supplied as part of the application. See Section III.A for eligibility requirements and definitions.
Cost Share Requirement	50% of Total Project Costs (100% match against DOE funds), unless an Applicant requests a reduction in the cost share as part of the application and receives approval from DOE. Applicants may request up to a 40% reduction in cost share, to no less than 10% of the Total Project Costs. Cos share reduction requests to less than 10% will not be considered. If DOE does not grant a request for reduced cost share, the Applicant will be required to meet the requisite 50% cost share. See Section III.B.7 for the content of cost share reduction requests and the criteria by which they will be reviewed.

We will discuss in detail, later in the presentation, the eligibility and cost share requirements. However, I'll give you a moment to read through the slide before continuing.

PAUSE.

Means of Submission	Applications <u>must</u> be submitted through EERE Exchange at https://eere-Exchange.energy.gov , DOE's online application portal. DOE will not review or consider applications submitted through other means. The Users' Guide for Applying to the Department of Energy DOE Funding Opportunity Announcements is found at https://eere-Exchange.energy.gov/Manuals.aspx .
Submission of Multiple Applications	Applicants may submit more than one application to this FOA or under a Topic Area, provided that each application is for a unique and distinct project. One application <u>must</u> be provided for each specific project. Submittals under different Topic Areas cannot be combined under one application, except as noted under Topic Area 1.b.
Application Forms	Required forms and templates for applications are available on EERE Exchange at https://eere-Exchange.energy.gov .

As indicated above, Applicants may submit more than one application to this FOA or under a Topic Area, provided that **each application is for a unique and distinct project**. One application <u>must</u> be provided for each specific project. Submittals under different Topic Areas cannot be combined under one application, except as noted under Topic Area 1.b.

We've discussed the means of submission and the application forms and will address this in more detail later in the presentation.

PAUSE.

FOA Description

Through this FOA, DOE is continuing its efforts to promote tribal energy sufficiency and to spur increased deployment of clean energy and energy efficiency projects on Indian lands. In support of the offices' objectives, the Office of Indian Energy is soliciting applications from Indian Tribes (including Alaska Native regional corporations and village corporations) and Tribal Energy Resource Development Organizations to:

- (1) Install clean energy and energy efficiency retrofit projects for tribal buildings (Topic Area 1);
 - a. Clean Energy Systems (Topic Area 1.a.)
 - b. "Deep Energy Retrofit" Energy Efficiency Measures (Topic Area 1.b.)

And,

(2) Deploy clean energy systems on a community-scale (Topic Area 2).



READ SLIDE

As indicated, per statute, <u>only</u> (1) Indian Tribes (including Alaska Native regional corporations and village corporations) and (2) Tribal Energy Resource Development Organizations are eligible to apply under this FOA. However, in future slides, we will address who and how different entities might be able to submit an application on behalf of an Indian Tribe or Tribes.

Next slide.

"Clean energy systems" for purposes of this FOA include:

- (1) renewable energy power systems; and
- (2) combined heat and power systems.

See definitions in Appendix A of the FOA.



READ SLIDE.

As DOE will **not** make eligibility determinations for potential Applicants prior to the date on which applications to this FOA must be submitted. The decision of whether to submit an application in response to this FOA lies <u>solely</u> with the Applicant.

Therefore, it is important to understand the FOA definitions to ensure your project fits the requirements of this FOA. So, over the next few slides I'll define important terms.

"Renewable energy systems", for purposes of this announcement, include systems for:

- (1) electric power generation; and/or
- (2) heating or cooling systems.

Renewable energy systems also include renewable energy fueled combined heat and power systems (see below).

- Renewable energy systems for <u>electric power generation</u> include, but are not limited to, photovoltaic (solar electric), biomass (including waste to energy), wind power, run-of-the-river hydropower, incremental hydropower, or other renewable energy hybrid systems for electricity power generation. Note that for purposes of this FOA, ground source heat pumps are considered an energy efficiency measure and included under Topic Area 1.b.
- Heating or cooling systems include, but are not limited to, the use of biomass for high efficiency combustion systems (i.e., stoves and boilers), active solar thermal systems for space or water heating, wind energy for heating, direct-use hydrothermal (geothermal) resources for water and space heating, or other renewable energy hybrid systems for heating and/or cooling.



Renewable energy systems may be proposed under (1) Topic Area 1.a for providing power, heating, or cooling on a facility-scale to Tribal buildings; or (2) under Topic Area 2 on a community-scale. Note that renewable energy systems may also be proposed along with Energy Efficiency Measures under Topic Area 1.b.

For this FOA, "Renewable energy systems" include systems for: (1) electric power generation; and/or (2) heating or cooling systems. Renewable energy systems also include renewable energy fueled combined heat and power systems.

The definitions are as shown on the slide and on page 5 of the FOA.

I'll give you a moment to read through the definitions.

PAUSE.

Note that for this FOA, ground source heat pumps are not defined as a renewable energy system, but rather included under energy efficiency measures.

Remember to capture any questions you may have as they come up and send them via

email to tribal@ee.doe.gov. Please include the FOA name and number in the subject line.

"Clean energy systems" for purposes of this FOA include:

- (1) renewable energy power systems; and
- (2) combined heat and power systems.

"Combined heat and power systems", for purposes of this announcement, include, but are not limited to, integrated systems that simultaneously generate heat and power using energy efficient turbines, reciprocating engines, micro-turbines, fuel cells, and waste heat recovery systems (capturing heat discarded by an existing process and using that heat directly or to generate power).

Eligible combined heat and power systems may only be fueled by <u>either</u>: (1) renewable energy resources, or (2) natural gas. Combined heat and power systems <u>not</u> fueled by either renewable energy resources or natural gas will <u>not</u> be considered.



As with renewable energy systems, combined heat and power systems may be proposed under (1) Topic Area 1.a for providing power, heating, or cooling on a facility-scale to Tribal buildings; or (2) under Topic Area 2 on a community-scale. Note that combined heat and power systems may also be proposed along with Energy Efficiency Measures under Topic Area 1.b.

Note that <u>only</u> combined heat and power systems fueled by <u>either</u> (1) renewable energy resources, or (2) natural gas will be considered. Note that combined heat and power includes waste heat recovery.

I'll give you a moment to read the definition. You may also find definitions under Appendix A of the FOA.

PAUSE.

Next slide.

"Energy Efficiency Measures (EEM)" means the implementation of building efficiency or industrial process efficiencies that use less energy to provide the same service.

Building efficiencies may include, but are not limited to,

- building envelope improvements (improvements to walls, roofs, foundation slab, ceiling, windows, doors, insulation),
- · the installation of energy efficient equipment,
- high-efficiency lighting,
- · efficient appliances,
- · air sealing,
- · moisture management,
- · controlled ventilation,
- · high R-value (high thermal resistance) insulation,
- · high efficiency windows,
- · efficient heating systems (furnaces, boilers, passive solar),
- efficient cooling systems (air conditioners, evaporative coolers),
- · ground source heat pumps,
- · high efficiency office equipment,
- · energy saving building electrical equipment, and
- · efficient mechanical systems and heat recovery ventilation units.



Under this FOA, Energy Efficiency Measures (EEM) may be proposed <u>only</u> under Topic Area 1.b. "Deep Energy Retrofit Energy Efficiency Measures". If submitted under any other Topic Area, the Application will be deemed non-responsive and will <u>not</u> be reviewed or considered.

"Energy Efficiency Measures (EEM)" for purposes of this FOA, means the implementation of (1) building efficiency or (2) industrial process efficiencies. Building efficiencies, may include, but are not limited to, the items listed on the slide. We'll go over "industrial efficiencies" on the next slide.

As previously mentioned, for this FOA ground source heat pumps are <u>not</u> defined as a renewable energy system, but as shown here under energy efficiency measures.

I'll give you a moment to read through the list of energy efficiency measures.

PAUSE.

"Energy Efficiency Measures (EEM)" means the implementation of building efficiency or industrial process efficiencies that use less energy to provide the same service.

Industrial process efficiencies may include, but are not limited to,

- · insulating piping,
- tank walls and roofs,
- the installation of higher efficiency equipment (e.g., heat exchangers, compressors, blowers, pumps, and fans),
- · minimizing air leaks,
- optimizing air systems through the use of variable speed drives, and
- adding or optimizing controls.



As indicated on the last slide, "Energy Efficiency Measures (EEM)" for purposes of this FOA, also include industrial process efficiencies, which may include, but are not limited to, the items listed on the slide.

I'll give you a moment to read through the list of energy efficiency measures.

PAUSE.

Please note that DOE will **not** answer eligibility questions.

Per Section III.F (Questions Regarding Eligibility), DOE will <u>not</u> make eligibility determinations for potential Applicants <u>prior to</u> the date on which applications to this FOA must be submitted. The decision of whether to submit an application in response to this FOA lies <u>solely</u> with the Applicant.



DOE will not answer eligibility questions. Specifically, DOE will <u>not</u> make eligibility determinations <u>prior to</u> the closing date of this FOA, such as (1) whether a particular entity is eligible to apply; or (2) whether a specific project meets the requirements and is eligible.

The decision to submit an application lies <u>solely</u> with the Applicant.

PAUSE.

Topic Areas

DOE is soliciting Applications from Indian Tribes (including Alaska Native regional corporations and village corporations) and Tribal Energy Resource Development Organizations to:

- (1) Install clean energy and energy efficiency retrofit projects for tribal buildings (Topic Area 1);
 - a. Clean Energy Systems (Topic Area 1.a.)
 - b. "Deep Energy Retrofit" Energy Efficiency Measures (Topic Area 1.b.)

And,

(2) Deploy clean energy systems on a community-scale (Topic Area 2).



As previous indicated, there are two (2) Topic Areas under this FOA. One for "facility-scale" projects (Topic Area 1) and one for "community-scale" projects (Topic Area 2).

Under Topic Area 1, applications may be submitted for clean energy systems (either renewable energy systems or combined heat and power systems) on a facility-scale which is Topic Area 1.a; or for deep energy retrofit measures (Topic Area 1.b.). We will go over each of these Topic Areas in more detail in the upcoming slides.

As previously stated <u>only</u> (1) Indian Tribes (including Alaska Native regional corporations and village corporations) and (2) Tribal Energy Resource Development Organizations are eligible to apply under this FOA. However, under "Applicant Eligibility" we will address who and how different entities might be able to submit an application on behalf of an Indian Tribe or Tribes.

Under **Topic Area 1**, DOE is soliciting Applications for the deployment of "facility-scale" systems to displace electrical, heating and/or cooling loads. Specifically,

- (a) Under Topic Area 1.a., DOE is soliciting **clean energy systems** (renewable energy or combined heat and power systems) to <u>displace and existing energy source</u> (e.g., electricity, heating oil, diesel oil, natural gas, or any other energy source or fuel used for electrical production, heating and/or cooling); and/or
- (b) Under Topic Area 1.b., DOE is soliciting "deep energy retrofit" energy efficiency measures to reduce the total of all energy used in a building or buildings (total of all energy sources combined including, but not limited to, electrical, propane, heating oil, diesel oil, natural gas, or any other energy or fuel used).



READ SLIDE

For Topic Area 1:

- "Facility-scale" for purposes of this announcement means a single or multiple "Tribally-owned or controlled building(s)" located on Indian lands.
- All proposed installations must be for <u>either:</u> (1) existing "Tribally-owned or controlled building(s)"; or (2) "Tribally-owned or controlled building(s)" which are being constructed or planned to be constructed during the proposed project period.
- NOTE: Costs associated with the construction of a building or buildings or structures such as carports (unless integral to the clean energy system being proposed) will <u>not</u> be considered by DOE for reimbursement or as cost share; only the incremental costs associated with the installation of clean energy systems or energy efficiency measures will be considered allocable to the proposed DOE funded project.



It is important to understand definitions to ensure your project fits the requirements of this FOA, as DOE will not make eligibility determinations prior to the date on which applications to this FOA must be submitted.

So, READ SLIDE

For Topic Area 1:

- "Tribally-owned or controlled building(s)" for purposes of this FOA, is
 one where the eligible entity has the authority to retrofit the building
 and where the building is either owned by the eligible entity or tribal
 members, or the eligible entity has a long-term lease (at least 20 years).
- Buildings may include, but are not limited to, tribal member homes, schools, community buildings, clinics, tribal government buildings, utility facilities (such as water/waste water systems), tribal casinos, or tribal businesses.



Also, READ SLIDE

Hopefully these definitions will help you decide whether your project would meet the requirements of this FOA. Now on to the specific Topic Area requirements.

Next slide. Thank you.

Under Topic Area 1.a., Clean energy systems (renewable energy systems or combined heat and power systems) **must**:

- (1) Displace an existing energy source (e.g., electricity, heating oil, diesel oil, natural gas or any other energy source or fuel used for electrical production, heating and/or cooling) by at <u>least 15% on a source energy basis</u>, and energy generated by combined heat and power systems must <u>displace 15% of the combined electricity and heating fuels on a source energy basis</u> (see Appendix C).
- (2) Be a minimum of 10 kW rated capacity (or Btu equivalent of 34,121 Btu/hr for heating and cooling), and
- (3) Use commercially-proven warrantied technology.



Under Topic Area 1.a., Clean energy systems (renewable energy systems or combined heat and power systems) **must**:

- (1) Displace an existing energy source by at <u>least 15% on a source energy basis</u>, and the energy generated by combined heat and power systems must displace 15% of the combined electricity and heating fuels on a source energy basis. Fore more on "source energy basis" see Appendix C. Note that we've provided conversion factors to help you convert energy and fuel to a "source energy basis", as well as common units of thousand British thermal units (kBtu).
- (2) The "clean energy systems" <u>must</u> also be a minimum of 10 kW rated capacity (or Btu equivalent of 34,121 Btu/hr for heating and cooling), and
- (3) <u>Must</u> use commercially-proven warrantied technology.

Note that the 10kW requirement may be for a single system or the cumulative of multiple systems.

To be considered "commercially-proven" for purposes of this FOA, the technology must be at least a Technology Readiness Level (TRL) of 9, where TRL 9 is "Commercial-Scale

Production/Application" and represents an in-service application of the technology in its final form and under mission condition. At TRL 9, the actual, commercial-scale system is proven through successful mission operations, whereby it is fielded and being used in commercial application. Information relative to the technology and its TRL should be provided as part of the FOA application. For more on TRL, see technology readiness level on wikipedia.

Next slide please. Thanks.

Under Topic Area 1.a., DOE is soliciting Applications for the deployment of "facility-scale" **clean energy systems** to displace electrical, heating and/or cooling loads.

- Applications must demonstrate the availability of the resource (renewable or natural gas). Applications proposing geothermal or biomass systems must also demonstrate the sustainability of the resource.
- Proposed systems may either be physically attached to the Tribally-owned or controlled building(s) or ground-mounted, but must be sited on Indian lands.
- For either (1) existing Tribally-owned or controlled building(s) or (2) a building(s) that is currently being constructed or planned to be constructed, the total energy displacement may be for either a single building, or the cumulative energy displaced in multiple buildings.
- The 15% displacement of an energy source(s) used in a building(s) <u>must</u> occur during the project period.



Also, under Topic Area 1.a, "facility-scale" clean energy system READ BULLETS.

Next slide.

Under Topic Area 1.a., DOE is soliciting Applications for the deployment of "facility-scale" **clean energy systems** to displace electrical, heating and/or cooling loads.

- For existing Tribally-owned or controlled building(s), the requirement for a 15% displacement in an existing energy source (or multiple energy sources if a combined heat and power system is proposed) in a building or buildings <u>must</u> be based on the actual annual consumption of that energy source(s) in the building or buildings during the prior year (12 consecutive months) as evidenced by utility bills (e.g., electric utility bills, fuel purchase invoices, or other comparable documentation for the energy source(s) to be displaced).
- Annual energy consumption data <u>must</u> be provided as an attachment under the Energy Use Data File (see Section IV.C.7.).



Under Topic Area 1.a. (Clean Energy Systems), the 15% displacement of an existing energy source <u>must</u> be based on the actual annual consumption of that energy source(s) in the building or buildings during the prior year (12 consecutive months) as evidenced by utility bills. Utility bills may include electric utility bills, fuel purchase invoices, or other comparable documentation for the energy source or sources to be displaced, and you will be required to provide those utility bills as part of your application.

Under Topic Area 1.a., DOE is soliciting Applications for the deployment of "facility-scale" **clean energy systems** to displace electrical, heating and/or cooling loads.

- For Tribally-owned or controlled buildings which are currently being constructed or planned to be constructed during the project period, the requirement for a 15% displacement in an existing energy source (or multiple energy sources if a combined heat and power system is proposed) must be based on the projected annual energy use for a 12 month period and those projections must be provided as part of the Application (see Section IV.C.7).
- Only the incremental costs associated with the installation of the clean energy system will be considered, not the cost of the building.

NOTE: Only clean energy systems will be considered under Topic Area 1.a. Projects proposing energy efficiency measures under Topic Area 1.a. will be deemed non-responsive and will <u>not</u> be reviewed or considered.



For Topic Area 1.a., clean energy systems may be READ BULLETS.

As previously stated, energy efficiency measures are <u>only</u> eligible under Topic Area 1.b. If any energy efficiency measures are being proposed in addition to the clean energy system(s), the project <u>must</u> be proposed under Topic Area 1.b. and must meet those requirements.

Next slide. Thank you.

Under Topic Area 1.a., EERE is soliciting Applications for the deployment of "facility-scale" **clean energy systems** to displace electrical, heating and/or cooling loads.

- Verification of the actual annual displacement (amount, cost, and percentage)
 of an energy source(s) will be required after installation of the renewable
 energy system(s) or combined heat and power system(s), and a description of
 those verification methods must be included as part of the Technical Volume
 (see Section IV.C., Content and Form of the Application).
- The percentage of energy displaced will be independently verified; therefore, the methodology described in Appendix C <u>must</u> be used. A Microsoft Excel template has been provided in EERE Exchange for calculating the amount of energy saved. Appendix C includes instructions on how to calculate the percentage of the energy displaced under this Topic Area, the conversion factors that <u>must</u> be used, and various examples.
- The Microsoft Excel template can be found on EERE Exchange by clicking "View Required Application Documents"



Please note that if you are selected for an award, you will ned to verify the actual displacement of the energy for a 12 month period after installation. As such, the project period will need to include an additional 12 months for this verification period.

READ SECOND BULLET

As part of this webinar, Dan and Caleb will describe the methodology for calculating the energy saved and provide a demonstration of the template.

Remember that if you are proposing to install clean energy systems for an existing building or buildings, **utility bills** (such as electric utility bills, fuel purchase invoices, or other comparable documentation for the energy source to be displaced) <u>must</u> be provided as part of your Application. And if the building or buildings are currently being constructed or planned to be constructed during the project period, the annual energy use <u>must</u> be projected and those projections provided as part of your Application.

Under Topic Area 1.b., DOE is soliciting Applications for the deployment of "facility-scale ""deep energy retrofit" energy efficiency measures to reduce the <u>total</u> of <u>all</u> energy used in a building or buildings.

- A "deep energy retrofit" for purposes of this Topic Area 1.b. is a whole-building approach involving a comprehensive renovation or remodeling strategy which combines multiple energy efficiency measures (EEM), so that significant energy savings are achieved, and the comfort, durability, health, and indoor air quality of the building or buildings is improved.
- Only projects proposing multiple EEMs will be considered; if an application proposes only a single EEM, the application will be deemed nonresponsive under and will <u>not</u> be reviewed or considered.
- See slide 18 and 19 for the definition of EEM or refer to Appendix A of the FOA.



READ SLIDE

Next slide please. Thank you.

Under Topic Area 1.b., EERE is soliciting Applications for the deployment of "facility-scale ""deep energy retrofit" energy efficiency measures to reduce the <u>total</u> of <u>all</u> energy used in a building or buildings.

Deep energy retrofit(s) **must**:

- (1) Be based on a prior energy audit or industrial energy assessment (hereafter referred to as "assessment"); and
- (2) Demonstrate the potential of <u>at least a 20% reduction in the **total** of all energy and fuel used</u> (total of all energy and fuel sources combined, including but not limited to, electricity, propane, heating oil, diesel oil, natural gas, or any other energy or fuel used) in the building and improve the comfort, durability, health, and air quality of a home or building.

NOTE: EEMs will <u>only</u> be considered under Topic Area 1.b. However, clean energy systems (renewable energy systems or combined heat and power systems) may be proposed along with the EEMs under Topic Area 1.b., and such clean energy systems must then meet the requirements specified under this section.



Under Topic Area 1.b. deep energy retrofit energy efficiency measures must READ BULLETS.

This is different than Topic Area 1.a. where only the energy source or sources being **displaced** are used to calculate the percentage of energy saved. Under this Topic Area (Topic Area 1.b.), <u>all</u> the energy and fuel sources used in a building or buildings are used to calculate the percentage of energy saved.

READ NOTE.

Next slide please. Thanks.

Under Topic Area 1.b., EERE is soliciting Applications for the deployment of "facility-scale ""deep energy retrofit" energy efficiency measures to reduce the <u>total</u> of <u>all</u> energy used in a building or buildings.

If a clean energy system (renewable energy system or combined heat and power) is being proposed in addition to the EEMs, the clean energy system must not only contribute toward meeting the 20% reduction in the **total** of all energy used in the building or buildings, but **must also**:

- (1) Be a minimum of 10 kW rated capacity (or Btu equivalent of 34,121 Btu/hr for heating and cooling), and
- (2) Use <u>commercially-proven warrantied technology</u> (see the definition of "commercially-proven" under Appendix A).



Under Topic Area 1.b. READ PARAGRAPH AND BULLETS.

Note that the 10kW requirement may be for a single system or the cumulative of multiple systems. And commercially-proven warrantied technology must be at a Technology Readiness Level of 9.

Next slide please. Thank you.

Under Topic Area 1.b., EERE is soliciting Applications for the deployment of "facility-scale ""deep energy retrofit" energy efficiency measures to reduce the <u>total</u> of <u>all</u> energy used in a building or buildings.

- The minimum system size (10 kW rated capacity or equivalent) of a proposed clean energy system may be for a single individual clean energy system or the aggregate of multiple clean energy systems.
- The 20% reduction in the total of all energy may be for either a single Tribally-owned building or the cumulative energy reduction in multiple buildings.



If a clean energy system (renewable energy system or combined heat and power) is being proposed in addition to the EEMs under Topic Area 1.b. "deep energy retrofit" energy efficiency measures, the "clean energy system" must be a minimum of 10 kW rated capacity or equivalent and may be for a single individual clean energy system or the aggregate of multiple clean energy systems.

And

If a clean energy system is proposed under Topic Area 1.b, in addition to energy efficiency measures, the system or systems must result in a 20% reduction in the **total** of all energy. The 20% reduction may be for <u>either</u>: (1) a single Tribally-owned building; or (2) the cumulative energy reduction in multiple buildings.

Next slide. Thank you.

Under Topic Area 1.b., EERE is soliciting Applications for the deployment of "facility-scale ""deep energy retrofit" energy efficiency measures to reduce the <u>total</u> of <u>all</u> energy used in a building or buildings.

- For existing Tribally-owned or controlled building(s), the requirement for a 20% reduction in the total of all energy sources used in a building or buildings must be based on the actual annual consumption of all energy sources used during the prior year (12 months of data) as evidenced by utility bills (e.g., electric utility bills, fuel purchase invoices, or other comparable documentation for all energy source used in the building or buildings).
- And, those utility bills must be provided as part of the application under the Energy Use Data File (see Section IV.C.7.).



Under Topic Area 1.b, READ BULLETS.

Next slide.

Under Topic Area 1.b., EERE is soliciting Applications for the deployment of "facility-scale ""deep energy retrofit" energy efficiency measures to reduce the <u>total</u> of <u>all</u> energy used in a building or buildings.

- For Tribally-owned or controlled buildings which are currently <u>being</u>
 <u>constructed</u> or <u>planned to be constructed</u> during the project period, the
 requirement for a 20% reduction in the total of <u>all</u> energy used in a
 building or buildings <u>must</u> be based on the projected annual energy
 use and those projections supplied as part of the Application.
- Only the incremental costs associated with the installation of the clean energy system will be considered, not the cost of the building.



Under Topic Area 1.b., READ BULLETS.

Next slide, please. Thank you.

Under Topic Area 1.b., EERE is soliciting Applications for the deployment of "facility-scale ""deep energy retrofit" energy efficiency measures to reduce the <u>total</u> of <u>all</u> energy used in a building or buildings.

- Verification of the actual annual reduction (amount, cost, and percentage) in the total of <u>all</u> energy used in a building(s) will be required after installation of the deep energy retrofits (minimum of 12-months), and a description of those verification methods <u>must</u> be included as part of the Technical Volume (see Section IV.C., Content and Form of the Application).
- The percentage of energy saved will be independently verified; therefore, the methodology described in Appendix C must be used. A Microsoft Excel template has been provided in EERE Exchange for calculating the amount of energy saved.



Under Topic Area 1.b, READ BULLETS.

Appendix C includes instructions on how to calculate the percentage of the **total** of <u>all</u> energy saved under this Topic Area, the conversion factors that must be used, and various examples.

Stay tuned for a demonstration of the Microsoft Excel template by Dan Olis and Caleb Rockenbaugh at the end of the presentation. Dan and Caleb will demonstrate how to use the Energy Saved Template provided to help you calculate energy saved. Note that this calculation only applies to Topic Area 1, not Topic Area 2. In preparation you may wish to download the template from EERE Exchange.

To locate a copy of the Template, search "EERE Exchange" on the Internet and once on the Funding Opportunity Exchange Page scroll down the table until you find "DE-FOA-0001390". Click on it and it will take you to the section of the webpage specific to this FOA. Note that depending on the size of your computer screen you may need to scroll down. To locate the Microsoft Excel Energy Savings Template scroll down to "Required Application Documents" and click on "View Required Application Documents" which will bring up a list of documents with hyper-links. For the Template, click on "Energy Saved Template Topic Area 1 Only".

Next slide, please.

Topic Area 2: Community-Scale Clean Energy Deployment

Under Topic Area 2, DOE is seeking Applications for the

- Deployment of "community-scale" clean energy systems (renewable energy power systems or combined heat and power systems) on Indian lands to provide electricity, and/or heating or cooling to many buildings or to an entire tribal community.
- For purposes of this FOA, "community-scale" means a project affecting
 - (1) many buildings or an entire tribal community and serving a substantial number of the total buildings within a community;

and/or

(2) providing a substantial percentage of the total community energy load.



Now on to Topic Area 2, Community-Scale Clean Energy Systems. READ SLIDE

Next slide please. Thank you.

Topic Area 2: Community-Scale Clean Energy Deployment - Continued

Under Topic Area 2, DOE is seeking Applications for the deployment of "community-scale" clean energy systems (renewable energy power systems or natural gas combined heat and power systems) on Indian lands to provide electricity, and/or heating or cooling to many buildings or to an entire tribal community.

To be considered, any clean energy system or the total of multiple systems proposed under this Topic Area, **must**:

(1) Be a minimum of 50 kW rated capacity (or for heating or cooling the Btu equivalent of 170,607 Btu/hr);

and

(2) Use <u>commercially-proven warrantied technology</u> (see the definition of "commercially-proven" under Appendix A).



Under "community-scale" clean energy systems (Topic Area 2), READ BULLETS.

Note that the 50kW requirement may be for a single system or the cumulative of multiple systems. As with Topic Area 1, any technology proposed must be a Technology Readiness Level 9.

Please note that there is no requirement under Topic Area 2 that the proposed system or systems save a certain percentage of energy, and therefore, the energy savings calculations under Appendix C and the Energy Saved template do <u>not</u> apply.

Next slide please.

Topic Area 2: Community-Scale Clean Energy Deployment - Continued

Under Topic Area 2, DOE is seeking Applications for the deployment of "community-scale" clean energy systems (renewable energy power systems or natural gas combined heat and power systems) on Indian lands to provide electricity, and/or heating or cooling to many buildings or to an entire tribal community.

- Applications <u>must</u> demonstrate the availability of the resource (renewable or natural gas), and
- Applications proposing geothermal or biomass systems must also demonstrate the sustainability of the resource.



Under Topic Area 2, READ BULLETS.

Next slide, please.

Topic Area 2: Community-Scale Clean Energy Deployment

Under Topic Area 2,

- All proposed projects must:
 - (1) Be on Indian lands,
 - (2) Owned or controlled by the eligible entity; and
 - (3) Benefit the eligible entity (Indian Tribe or Tribal Energy Resource Development Organization) and tribal community;

However, the buildings where the energy or heat is to be used do not necessarily need to be "owned or controlled" by the eligible entity.

"Owned or controlled" for purposes of this FOA, is where the eligible
entity has or has been given certain rights and duties, specifically the
ability to exercise authority, direction and control over the project. Note
that ownership may be private, collective, or common and some of
those rights and duties may be held by different parties.



READ SLIDE. Be aware that the FOA document currently does not specify that the project must be "owned or controlled" by the eligible entity. To address this inaccuracy and other administrative changes, we are preparing to amend the FOA document. To be notified of an amendment, please ensure you are registered in Grants.gov or subscribed to our email list.

Next slide please. Thank you.

Applications Specifically Not of Interest

The following types of applications will be deemed nonresponsive and will **not** be reviewed or considered for an award:

- Applications that fall outside the technical parameters specified in Section I.B of the FOA.
- Applications proposing the evaluation of product marketing opportunities, assessment of manufacturing opportunities, research, product development, or the construction of manufacturing facilities or buildings.
- Any application where the Applicant has already taken irreversible actions regarding the proposed DOE funded project, where the proposed DOE funded project consists of only the installation of clean energy system(s) and/or the installation and energy efficiency measures, and not the construction of a building or structure such as a carport. Irreversible actions relative to the proposed DOE funded project may include, but are not limited to, site clearing, ground breaking, equipment or system purchase or installation, building renovation, and building retrofits (see Section VI.C.6).



On the next few slides, we're going to discuss application <u>not</u> of interest. These are included on page 11 of the FOA document.

As the third bullet may be a little confusing, I'll read the slide and then try to clarify.

READ SLIDE.

As an example, "Since the intent of Topic Areas 1.a. and 2 is for the installation of clean energy systems, any irreversible actions including the purchase and installation of a solar system, begun before being selected for funding or before receiving a DOE Environmental Determination, are "not of interest" and cannot be considered. Therefore, as long as the proposed project has been selected for funding and DOE has made an environmental determination, then the purchase and installation of a solar system is allowed." Note, however, that if you are selected for negotiation and intend to purchase or install systems prior to an award being executed, you may wish to request DOE Contracting Officer

approval for pre-award costs.
We'll explore costs associated with the construction of a building or structure such as a carport in the next slide.
Next slide, please.
Just a reminder before we continue. Please capture any questions you may have as they come up and send them via email to tribal@ee.doe.gov. Please include the FOA name and number in the subject line.

Applications Specifically Not of Interest - Continued

The following types of applications will be deemed nonresponsive and will **not** be reviewed or considered for an award:

- Applications proposing the construction of a building or buildings or structures such as carports. Only the incremental costs associated with the installation of clean energy system(s) or energy efficiency measures (retrofits) will be considered allocable to the proposed DOE funded project and not the cost of constructing the building(s), or structures, unless those structures are integral to the clean energy system(s).
- Applications proposing energy conservation measures, where energy
 conservation for purposes of this FOA is decreasing energy consumption by
 reducing or going without a service to save energy. Energy conservation typically
 involves a behavioral change and may include meters or other indicators to
 induce that behavioral change; hence, applications proposing the installation of
 meters and/or other indicators to induce behavioral changes, for example, will be
 deemed nonresponsive and not be reviewed or considered.



The following types of applications are **not** of interest.

READ BULLETS.

Next slide, please. Thank you.

Applications Specifically Not of Interest - Continued

The following types of applications will be deemed nonresponsive and will **not** be reviewed or considered for an award:

- Applications proposing combined heat and power systems not fueled by either renewable energy resources or natural gas.
- Applications for commercial or utility-scale projects intended solely for profit through the export of electricity off Indian lands for commercial sale.
- Applications proposing the use of materials, supplies, or equipment which are not commercially-proven and warrantied.
- Applications proposing the use of materials, supplies, or equipment which are not manufactured in the United States (unless waived).
- Applications proposing studies or development (pre-construction) activities or any other activity which does not result in the generation of electricity and/or heating or cooling, or a reduction in energy use.



More, types of application **not** of interest include:

READ BULLETS.

Nest slide, please.

Average Award Amount DOE anticipates making awards that range from \$50,000 to \$500,00 Topic Area 1 (Tribal Building Clean Energy and Energy Efficiency Retrand from \$250,000 to \$1,000,000 for Topic Area 2 (Community-Scal	
	etrofits
Types of Grants Funding Agreements	
Period of Performance 1 to 2 years, but no longer than 3 years (including the energy saving verification period for Topic Area 1).	ngs

Next, on to award information.

As discussed in the Executive Summary, DOE expects to make approximately \$4 to \$6 million in Federal funds available for new awards under this FOA. The average award amount varies by Topic Area as shown.

DOE intends to fund grants under this FOA, as opposed to Cooperative Agreements or some other type agreement.

And, the period of performance is expected to be 1 to 2 years, but no longer than 3 years, including the 12-month energy savings verification period for Topic Area 1.

Next slide please. Thanks.

Applicant Eligibility

Who's Eligible to Apply?

- Only the following types of Applicants are eligible to apply to this FOA. Applicants that do not meet the requirements will be deemed ineligible and their Applications will not be reviewed or considered.
- In accordance with EPAct 2005 authorities and consistent with 2 CFR 910.126(b), eligibility for award under this Funding Opportunity Announcement is restricted to:
 - (1) an Indian Tribe; or
 - (2) Tribal Energy Resource Development Organization; and on whose
 - (3) Indian Lands the project(s) will be located.



Now we'll go over Applicant eligibility.

READ BULLETS

Although only (1) Indian Tribes (including Alaska Native regional corporations and village corporations) and (2) Tribal Energy Resource Development Organizations are eligible to apply under this FOA, other entities to be discussed on an upcoming slide may be able to submit an application on behalf of an Indian Tribe or Tribes, provided they have the proper documentation that authorizes them to submit on behalf of an Indian Tribe or Tribes.

Next slide.

- "Indian Tribe," for purposes of this announcement, means any "Indian Tribe, Band, Nation or other organized group or community" (see below for further definition), including any Alaska Native village, regional corporation, or village corporation as defined in and established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688) [43 U.S.C. §§ 1601 et seq.], which are recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.
- For purposes of this announcement, an eligible "Indian Tribe" (including Alaska Native villages, but not regional or village corporations), must be federally recognized as listed in Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs, published by the Department of Interior's Bureau of Indian Affairs in the Federal Register on January 14, 2015, 80 FR 1942, as supplemented by the Bureau of Indian Affairs Final Determination for Federal Acknowledgment of the Pamunkey Indian Tribe effective October 6, 2015 unless the petitioner or an interested party files a request for reconsideration under § 83.11as published in the Federal Register July 8, 2015, 80 FR130.



The definition of "Indian Tribe" is as shown.

PAUSE.

Note that an "Indian Tribe" for purposes of this FOA includes any Alaska Native village, regional corporation, or village corporation. And, "Indian Tribe" (including Alaska Native villages, but not regional or village corporations) must be **Federally recognized** as listed in "Indian Entities Recognized and Eligible to Receive Services from the United States *Bureau of Indian Affairs*", published by the Department of Interior's Bureau of Indian Affairs in the Federal Register on January 14, 2015 and as supplemented by the Bureau of Indian Affairs Final Determination for Federal Acknowledgment of the Pamunkey Indian Tribe effective October 6, 2015, unless the petitioner or an interested party files a request for reconsideration under § 83.11 as published in the Federal Register July 8, 2015, 80 FR130.

So, unless someone files a request for reconsideration of the acknowledgement of the Pamunkey Tribe (of which I hope I'm pronouncing correctly), Indian Tribes are the 567 Federally-recognized Tribes.

You may also find these definitions under Section III.A. of the FOA itself which begins on page 13.

Next slide, please. Thank you.

 "Tribal Energy Resource Development Organization" for purposes of this announcement means an "organization" of two or more entities, at least one of which is an Indian Tribe (see "Indian Tribe" above) that has the written consent of the governing bodies of all Indian Tribes participating in the organization to apply for a grant or loan, or other assistance under 25 U.S.C. § 3503, where "organization" means a partnership, joint venture, Limited Liability Company (LLC) or other unincorporated association or entity that is established to develop Indian energy resources."



As defined in the Energy Policy Act of 2005, a READ SLIDE

Please be aware that that written consent of the governing bodies of all Indian Tribes participating in the organization to apply for this grant, will be required to be provided as part of any grant application. More on "Statement of Commitment and Cost Sharing" later in the presentation.

PAUSE.

Next slide, please.

Entities who may, given the authority, submit an application on behalf of an Indian tribe.

- 1) Tribal Consortium
- 2) Tribal Organization
- 3) Inter-tribal Organization



As previously indicated, although per statute <u>only</u> (1) Indian Tribes (including Alaska Native regional corporations and village corporations) and (2) Tribal Energy Resource Development Corporations are eligible, other entities, given the authority, may be able to apply on behalf of an Indian tribe.

In this case, the three types of entities identified on this slide.

We'll now go through the definitions of each of these entities and the types of evidence needed as part of the application to document that authority.

If you're following along with the FOA document, see page 14.

Next slide. Thank you.

"Tribal Consortium" (plural consortia), for purposes of this announcement, means a group of Indian Tribes (as defined above), that have chosen to submit a single Application. Under this announcement, a Tribal Consortium is eligible to submit an application provided the application is submitted by a single Indian Tribe representing the Consortium.



The definition of a "Tribal Consortium" for purposes of this funding Opportunity Announcement is a shown on the slide.

I give you a moment to read the definition.

PAUSE.

Next slide, please. Thank you.

- "Tribal Organization," for purposes of this announcement means any legally established organization of an Indian Tribe, which is controlled, sanctioned, or chartered by the recognized governing body of that Indian Tribe.
 - A "Tribal Organization" may include, but is not limited to, a subsidiary, subdivision, or instrumentality of an Indian Tribe, established under Congressional, State or Tribal law to act on behalf of an Indian Tribe.
 - Applications may be submitted by an authorized "Tribal Organization", provided evidence of the authority to submit an Application, relative to the proposed project, is supplied as part of the Application.
 - Evidence may include, but is not limited to, a constitution, resolution, ordinance, executive order, charter or other legal documentation.
 - DOE will determine the sufficiency of the authorization based on the evidence submitted as part of the Application.



"Tribal Organization," for purposes of this announcement means any legally established organization of an Indian Tribe, which is controlled, sanctioned, or chartered by the recognized governing body of that Indian Tribe. Examples of "Tribal Organizations" are a subsidiary, subdivision, or instrumentality of an Indian Tribe, established under Congressional, State or Tribal law to act on behalf of an Indian Tribe.

READ BULLETS, starting with the 2nd.

Note that DOE will <u>not</u> make a determination as to the sufficiency of any evidence of authority <u>prior to</u> the date on which applications to this FOA must be submitted.

My apologies for the font size; however this definition can be found on page 14 of the FOA.

Next slide.

- "Inter-Tribal Organization," for purposes of this announcement, means any organization comprised of two or more Indian Tribes, established under Congressional, State, or Tribal law to act on behalf of the participating Indian Tribes.
 - "Inter-Tribal Organizations" may include, but are not limited to, inter-tribal councils, regional tribal organizations or associations, and tribal federations.
 - Applications may be submitted by an authorized "Inter-Tribal Organization", provided evidence of the authority to submit an Application, relative to the proposed project, is supplied as part of the Application.
 - Evidence may include, but is not limited to, a resolution, ordinance, executive order, charter, P.L. 93-638 contract, self-governance compact, or other legal documentation.
 - DOE will determine the sufficiency of the authorization based on the evidence submitted as part of the Application.



"Inter-Tribal Organization," for purposes of this announcement, means any organization comprised of two or more Indian Tribes, established under Congressional, State, or Tribal law to act on behalf of the participating Indian Tribes. Examples of "Inter-Tribal Organizations" are inter-tribal councils, regional tribal organizations or associations, Alaska regional development organizations, and tribal federations.

Like applications submitted by a "Tribal Organization", applications submitted by an "Inter-Tribal Organization" <u>must</u> also provide evidence of their authority to submit an application on behalf of an Indian Tribe. The third bullet identifies various examples of evidence which may document that authority to submit an application on behalf of an Indian Tribe (or Tribes).

Again, DOE will determine the sufficiency of the authorization based on the evidence submitted as part of the Application, **not** <u>prior to</u> the date on which applications to this FOA must be submitted.

As previously indicated, "DOE will <u>not</u> make eligibility determinations for potential Applicants prior to the date on which applications to this FOA must be submitted. The decision of whether to submit an application in response to this FOA lies <u>solely</u> with the Applicant."

Again, my apologies for the font size; however this definition can be found on page 14 of the FOA.

Next slide, please. Thank you.

- "Indian Lands" or "Indian Country" for purposes of this Announcement, is defined as:
 - any land located within the boundaries of an "Indian reservation" (see definition below), pueblo, or rancheria;
 - (b) any land not located within boundaries of an Indian reservation, pueblo, or rancheria, the title to which is held -
 - (i) in trust by the United States for the benefit of an Indian Tribe or an individual Indian:
 - (ii) by an Indian Tribe or an individual Indian, subject to restriction against alienation under laws of the United States; or
 - (iii) by a dependent Indian community;
 - (c) land that is owned by an Indian Tribe and was conveyed by the United States to a Native Corporation pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. § 1601 et seq.), or that was conveyed by the United States to a Native Corporation in exchange for such land;
 - (d) lands held in fee simple (purchased or owned); and
 - (e) lands under a long-term Federal land lease (at least 20 years).
 - (f) land that was conveyed to a Native Corporation pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. § 1601 et seq.) and subsequently conveyed to another entity, provided that entity is either a Native village or Tribal governmental entity or the land is held, invested, managed for and on behalf of a Native village or Tribal governmental entity.



Indian land is as defined in the Energy Policy Act of 2005 and included here. My apologies to the font size, but please refer to page 15 of the FOA document.

Additionally, for purposes of this FOA, Indian Lands also include:

- (1) lands held in fee simple (purchased or owned);
- (2) lands under a long-term Federal land lease (at least 20 years); and
- (3) land that was conveyed to a Native Corporation pursuant to the Alaska Native Claims Settlement Act and subsequently conveyed to another entity, provided that entity is either a Native village or Tribal governmental entity or the land is held, invested, managed for and on behalf of a Native village or Tribal governmental entity.

Next slide, please.

Cost Sharing Requirements

- Under this Funding Opportunity Announcement, required cost share <u>must</u> be at least 50% (100% match against DOE funds) of the total allowable costs of the project (i.e., the sum of the Government share, and the recipient share of allowable costs equals the total allowable cost of the project), <u>unless</u> an Applicant request for reduced cost share is received and approved by DOE (see Cost Share Reduction Request in Section III. B.7).
- Failure to meet the requirements of this subsection may result in your Application not being reviewed or considered.



Next, on to cost sharing.

Under this Funding Opportunity Announcement, required cost share <u>must</u> be at least 50% (100% match against DOE funds) of the "total allowable costs of the project", <u>unless</u> an Applicant request for reduced cost share is received and approved by DOE (see Cost Share Reduction Request in Section III. B.7).

The cost share percentage is calculated on the "total allowable cost of the project", which is the sum of the Government share, and the recipient share, of allowable costs.

Next slide. Thanks.

Cost Sharing Requirements - Continued

 <u>All</u> cost share <u>must</u> come from non-Federal sources unless otherwise allowed by law (see note below and Appendix B).
 See 2 CFR 200.306 and 2 CFR 910.130 for the applicable cost sharing requirements.

NOTE:

- Per the Indian Self-Determination Act (Public Law 93-638) as codified and amended, funding under the Indian Self-Determination Act may be used as non-Federal cost share by Indian Tribes on Federal grants
- For Tribal self-governance funding agreements, see 25 U.S.C. Section 458cc(j), Funds, "All funds
 provided under funding agreements entered into pursuant to this subchapter, and all funds provided
 under contracts or grants made pursuant to this subchapter, shall be treated as non-Federal funds for
 purposes of meeting matching requirements under any other Federal law."
- For self-determination contract funding, see 25 U.S.C Section 450h(c), Use as matching shares for
 other similar Federal grant programs, "The provisions of any other Act notwithstanding, any funds
 made available to a tribal organization under grants pursuant to this section may be used as matching
 shares for any other Federal grant programs which contribute to the purposes for which grants under
 this section are made."
- For compact funding, see 25 U.S.C. Section 450j-1(j), "Notwithstanding any other provision of law, a tribal organization may use funds provided under a self-determination contract to meet matching or cost participation requirements under other Federal and non-Federal programs."



All cost share must come from non-Federal sources unless otherwise allowed by law.

Included here and in the FOA on page 16 are a few instances where Federal funds can be used as non-Federal cost share, including funding under the

- (1) Indian Self-Determination Act,
- (2) Tribal self-governance funding agreements,
- (3) self-determination contract funding, and
- (4) compact funding.

For more on cost share, see Appendix B of the FOA document.

PAUSF.

Next slide, please.

Cost Share Contributions

- Contributions must be:
 - Specified in the project budget
 - Verifiable from the Recipient's records
 - Necessary and reasonable for proper and efficient accomplishment of the project
- Every cost share contribution must be reviewed and approved in advance by the Contracting Officer and incorporated into the project budget before the expenditures are incurred
- As all sources of cost share are considered part of total project costs, the cost share dollars will be scrutinized under the same Federal regulations as Federal dollars to the project.



The <u>total</u> budget presented in the application <u>must</u> include <u>both</u> Federal (DOE) and Non-Federal (cost share), which combined reflect the TOTAL PROJECT COSTS proposed.

All costs must be verifiable from the Recipient's records and be necessary and reasonable for the accomplishment of the project.

I'll pause so you can read through the slide.

PAUSE.

Next slide. Thank you.

Allowable Cost Share

- Cost Share must be allowable and must be verifiable upon submission of the Full Application
- Refer to the following applicable Federal cost principles:

Entity	Cost Principles
Educational Institutions	2 CFR Part 220
State, Local, and Indian Tribal Governments	2 CFR Part 225
Non-profit Organizations	2 CFR Part 230
For-profit Organizations	FAR Part 31



Cost Share must be allowable and must be verifiable at the time of submission of the Full Application. Please refer to this chart for your entity's applicable cost principles. It is imperative that you follow the applicable cost principles when creating your budget for the Full Application.

Next slide please.

Allowable Cost Share - Continued

- Cash Contributions
 - May be provided by the Recipient, Subrecipients, or a Third Party
- In-Kind Contributions
 - Can include, but are not limited to:
 - personnel costs,
 - indirect costs,
 - facilities and administrative costs,
 - rental value of buildings or equipment, and
 - the value of a service, other resource, or third party in-kind contribution



Cost share can be provided in cash or as in-kind contributions. It can be provided by the Recipient, subcontractors, or a third party.

The basic definition of in-kind cost share is the donation of personnel time, equipment, facilities, or other items that an organization will contribute to the project. It can take many forms, each of which must be assigned a dollar value to be included in the budget. Some examples of in-kind cost share are the donation of work hours, facility use, unrecovered indirect costs, and equipment use.

Next slide.

Unallowable Cost Share

- The Recipient may <u>not</u> use the following sources to meet its cost share obligations including, but not limited to:
 - Revenues or royalties from the prospective operation of an activity beyond the project period
 - o Proceeds from the prospective sale of an asset of an activity
 - Federal funding or property (e.g., Federal grants, equipment owned by the Federal Government)
 - Renewable Energy Credits (RECs) or other green attribute monetization funds, or any other form of cost sharing received after the DOE grant period or those received prior to being selected for award under this FOA.
 - o Expenditures reimbursed under a separate Federal Technology Office
 - o Independent research and development (IR&D) funds
 - o The same cash or in-kind contributions for more than one project or program



Be aware that there are items that are considered unallowable cost share. If a cost is considered unallowable, it cannot be counted as cost share. This slide provides some examples of cost share that is unallowable.

PAUSE.

Please take note of the fourth bullet, which states that "Renewable Energy Credits (RECs) or other green attribute monetization funds, or any other form of cost sharing received <u>after</u> the DOE grant period or those received <u>prior</u> to being selected for award under this FOA, are **not** allowable cost share."

Next slide, please.

Cost Share Payment

- Recipients must provide documentation of cost share contribution, incrementally over the life of the award.
- The cumulative cost share percentage provided on <u>each</u> <u>invoice</u> must reflect, at a minimum, the cost sharing percentage negotiated.
- In limited circumstances, and where it is in the government's interest, the DOE Contracting Officer may approve a request by the Recipient to meet its cost share requirements on a less frequent basis, such as monthly or quarterly. See Section III.B.6 of the FOA (see Cost share Payment on page 19).



If an award is made, cost share must be provided on an invoice-by-invoice basis at, as a minimum, the percentage negotiated. However, if you are not able to provide the cost share on an invoice-by-invoice basis, you may request a waiver from the DOE Contracting Officer. Such a request would be made after selection, but prior to award.

For example, if an award is executed and an entity is requesting reimbursement of \$50,000 and the cost share is 50%; then, the cost share reflected on that invoice must be \$50,000 – 50% in project costs of \$100,000.

PAUSE

Next slide, please. Thank you.

Cost Share Reduction Request

Applicants may request a cost share reduction (to no less than 10% of the total project costs) as part of their Application.

- DOE will evaluate the following factors in determining whether an Applicant's request for reduced cost share will be granted.
 - Financial need
 - Economic benefits
 - Environmental benefits
- The Applicant's financial need is significantly more important than the
 project's economic or environmental benefits. If the Applicant <u>fails</u> to
 demonstrate financial need, the other factors will <u>not</u> be considered,
 and the cost share request will be denied.
- If DOE does not grant the request for reduced cost share, the Applicant will be required to meet the requisite 50% cost share.



READ SLIDE.

Next slide.

Cost Share Reduction Request - Continued

- To be considered, a cost share reduction request <u>must</u> justify the reduction in cost share by addressing the Applicant's financial need and the economic and environmental benefits of the project if it were to be implemented.
- Evidence of financial need in the form of Financial Statements <u>must</u> be included as part of the Application (see Section IV.C.20). Any other supplemental data may be included as an attachment with the cost share reduction request itself (see Section IV.C.19).
- Cost share reductions of less than 10% of the total allowable costs of the project will not be considered.



READ SLIDE

Section III.B.7 of the FOA (pages 19-20) identifies the content of a cost share reduction request.

Next slide please.

Content and Form of Full Applications

- Applications must include:
 - Application for Federal Assistance (SF-424): The formal application form signed by the authorized representative of the applicant.
 - Summary for Public Release: Applicants must provide a 1 page summary of their proposed project for public release.
 - Summary Slide: A single PowerPoint slide that provides quick facts about the proposed project.
 - Technical Volume: Key submission describing the proposed project and addressing the Merit Review Criteria (Maximum of 15 pages)
 - Workplan: Detailed activities and tasks to complete the project (Maximum of 5 pages)
 - Attachments: Supplemental information to support and supplement the application.
 - Budget (SF-424A) & Budget Justification (EERE 335): Detailed budget for the project (Both DOE funds and Cost share).
 - Administrative Documents: Disclosure of Lobbying Activities (SF-LLL) and Waiver Requests: Performance of Work in the United States



Next on to the Content and Format of an Application.

Applications must include:

1) Application for Federal Assistance (Form SF-424): The formal application form signed by an authorized representative of the applicant. By signing, the authorized representative is making certain certifications and assurances, and therefore the form must be printed, signed, and scanned before being uploaded as part of your application.

Note that all forms can be obtained form the EERE Exchange webpage under the "Required Application Documents". By clicking "Required Application Documents", hyper-links to the FOA forms and documents appear and from which those documents can be downloaded, completed, and submitted as part of your application.

- 2) Summary for Public Release: Applicants are required to submit a 1 page summary of their proposed project for public release.
- 3) Summary Slide: A single PowerPoint slide that provides quick facts about the proposed project. Slide content requirements are provided in the FOA.

4) Technical Volume: The key submission describing the proposed project and addressing the Merit Review Criteria. The technical volume must not exceed 15 pages as DOE will only review the first 15 pages. See the Table on pages 27-34 of the FOA for specific content. However, briefly, the Technical Volume needs to include a project description, relevant background, must demonstrate the technical and economic viability of the proposed project, describe and quantify the outcomes, specifically the energy saved, and identify the roles, responsibilities, resources, and capabilities of the applicant and project team. Additionally, the Technical Volume must address commitments and cost sharing by the applicant and project team members.

The actual commitments, including

- a) an executed Tribal Council Resolution by each participating Indian Tribe,
- b) a declaration (or resolution) from each Tribal Energy Resource Development Organization or Tribal Consortium,
- c) and a letter of commitment from all other project participants, need to be submitted as an Attached to your application.

See pages 37 and 38 of the FOA for the content of those statements of commitment. Be aware that the executed Tribal Council Resolution(s), declarations (or resolutions) and letters of commitment must be specific to this Funding Opportunity Announcement and include a statement of the level and type of cost share committed. Failure to submit the appropriate Tribal Council Resolution(s), declarations (or resolutions) and letters of commitment with your Application may result in your Application not being reviewed or considered.

- 5) Workplan: The Workplan should describe the work to be accomplished and how the Applicant will achieve the milestones, including project milestones, and a schedule. The Workplan must not exceed 5 pages as only the first 5 pages will be reviewed. See pages 35-36 of the FOA specific content of the Workplan and Appendix D includes the format for the Workplan.
- 6) Budget (Form SF-424A) & Budget Justification (Form EERE 335): The Budget and Budget justification <u>must</u> include both the funds requested from DOE as well as cost share. Let me repeat that the budget and budget justification <u>must</u> reflect all project costs, regardless of whether those funds are being requested form DOE or provided as cost share. Supplemental budget information such as a copy of your indirect Rate Agreement, vendor quotes, or other information may be included as an Attachment under "Budget Support" file. Remember all forms can be obtained from the EERE Exchange website.
- 7) Administrative Documents include a Disclosure of Lobbying Activities (Form SF-LLL) and if

applicable, a request to waive the Performance of Work in the United States requirement. Remember, the disclosure of lobbying activities is a required form for <u>all</u> applicants. With respect to the Waiver Request for Performance of Work in the United States, all work under DOE funding agreements <u>must</u> be performed in the United States, unless a waiver is requested and approved. This requirement does <u>not</u> apply to the purchase of supplies and equipment, so a waiver is <u>not</u> required for foreign purchases of these items. However, the Recipient (if an award is made) should make every effort to purchase supplies and equipment within the United States.

Please use the table on pages 24-25 of the FOA document as a checklist for ensuring your application includes the required content.

Next slide please. Thanks.

SUBMISSION	#	COMPONENTS	FILE NAME (IF NECESSARY)
(PDF, unless stated	1	Application for Financial Assistance SF-424 (Required)	ControlNumber_ApplicantName _App424
otherwise)	2	Summary for Public Release (Required, 1 page limit)	ControlNumber_ApplicantName _Summary
	3	Summary Slide (Required, 1 page limit, Microsoft PowerPoint format)	ControlNumber_ApplicantName _Slide
	4	Technical Volume (Required, 15 page limit , see Section IV.C.4)	ControlNumber_ApplicantName _TechnicalVolume
	5	Workplan (Required, 5 page limit including milestone table and project schedule, Microsoft Word format)	ControlNumber_ApplicantName _Workplan
	6-15	Attachments	
	16	Budget Justification Workbook EERE 335 (Required, Microsoft Excel format. Applicants must use the template available in EERE Exchange)	ControlNumber_ApplicantName _Budget_Justification
	17	Subaward Budget Justification Workbook EERE 335, if applicable (Required only if thresholds met, Microsoft Excel format . Applicants must use the template available in EERE Exchange)	ControlNumber_ApplicantName _Subawardee_Budget_Justificati on
	18	Budget Support (Optional)	ControlNumber_ApplicantName _Budget_Support
	19-20	Cost Share Reduction Request	
	21	SF-LLL Disclosure of Lobbying Activities (Required)	ControlNumber_LeadOrganizati on_SF-LLL
	22	Waiver Request: Performance of Work in the United States (Optional)	ControlNumber_LeadOrganizati on Waver

This slide summarizes the elements of an application and is included on pages 24-25 of the FOA document. I'd recommend if you choose to apply to this funding opportunity, to use this table as a checklist when preparing and when uploading your application.

Note: During the submittal of your Application in EERE Exchange, files are denoted as "Required" or "Optional". Be aware that files designated as "Optional" in this table, and in EERE Exchange, may actually be necessary to complete your Application and to fully address the merit review criteria.

We discussed items 1-5 on the last slide, all of which are required elements of your application. Items 6-15 are various attachments and will be discussed on the next slide.

Items #16 and #17 are the required Budget Justification Forms (Form EERE 335). A budget Justification form (Form EERE 335) **must** be provided for the applicant (Item #16 on the slide) and that budget **must** include all proposed project costs (both DOE and cost share).

And under #17, Applicants <u>must</u> provide a separate budget justification (Form EERE 335) for each subawardee (subrecipient or subcontractor, excluding vendors) that is expected to perform work estimated to be **more than \$250,000** or **25 percent of the total work effort** (whichever is less). Remember, the budget Justification must address the total project

costs, both the funds being requested from DOE, as well as those proposed as cost share.

Budget support may also be provided as an attachment (see Item #18). Budget support might include documentation such as an Indirect Rate Agreement, breakdown of fringe costs, vendor quotes which exceed \$250,000, or other relevant information.

Items #19 and #20 will be discussed on an upcoming slide and we covered Items #21 and #22 on the last slide.

Remember to capture any questions you may have as they come up and send them via email to tribal@ee.doe.gov, including the FOA name and number in the subject line.

SUBMISSION	#	COMPONENTS	FILE NAME (IF NECESSARY)
Application	6-15	Attachments	
(PDF, unless stated	6	Site and Resources Maps and Graphics (Optional)	ControlNumber_LeadOrganization_Maps Resources
otherwise)	7	Energy Savings Calculations File (Required only for Topic Area 1, Microsoft Excel format . See Appendix C for the methodology that <u>must</u> be used. A Microsoft Excel template is available in EERE Exchange).	ControlNumber_ApplicantName_EnergySavings
	8	Energy Use Data (Required for Topic Area 1 only)	ControlNumber_ ApplicantName _EnergyUseData
	9	Energy Audits for Deep Energy Retrofits File (Required for Topic Area 1.b only)	ControlNumber_ ApplicantName _EnergyUseData
	10	Design and Engineering File (Optional)	ControlNumber_ ApplicantName Engineering
	11	Economics File (Optional)	ControlNumber_ApplicantName Economics
	12	Statements of Commitment and Cost Sharing File (Required)	ControlNumber_ApplicantName Commitments
	13	Agreements File (Optional)	ControlNumber_ApplicantName Agreements
	14	Subcontract Plan File, if applicable (Optional)	ControlNumber_ApplicantName SubcontractPlan
	15	Resume File (Required)	ControlNumber_ApplicantName Resumes

Items #6 through 15 are Attachments to your application.

As previously indicated, the "Optional Attachments", may in fact be necessary to complete your application, and include:

The Site and Resources Maps and Graphics (Item #6 on the Table). This Attachment may be used to supply any graphics to supplement the Technical Volume including maps, photographs, or other visuals of the project location or building(s) affected by the proposed project. Evidence of the renewable energy resource or natural gas supply (if applicable) including resource maps and quantitative resource data should also be included under this file. Evidence may be in the form of a previously completed feasibility study. Any supplemental information or supporting studies should be included here.

Attachments #7, #8, and #9 are <u>only</u> required for Topic Area 1. Anyone applying under Topic area 2 will not need to submit these particular attachments.

2) The Energy Savings Calculations File (#7 in the table). As previously indicated, the methodology included in Appendix C **must** be used to calculate the energy displacement for Topic Area #1.a. (Clean Energy Systems) and the <u>reduction in the **total** of all energy and</u>

<u>fuel used</u> for Topic Area 1.b. ("Deep Energy Retrofit" Energy Efficiency Measures). Remember, that we have provided a Microsoft Excel Template to assist you in those calculations and a demonstration will follow my presentation.

- 3) The Energy Use Data File (Item #8) is **required** for Topic Area 1 (Tribal Building Clean Energy and Energy Efficiency Retrofits) and should include a summary of the energy used by month for 12 consecutive months for each buildings affected, and provide evidence of that prior consumption data to include the amount by energy source or fuel type and cost. Evidence may include utility bills, fuel purchase invoices, or other comparable documentation. For affected buildings being constructed, or to be constructed during the project period, supply the methodology, calculations, and assumptions used to project the annual energy use.
- 4) If Deep Energy Retrofits are being proposed under Topic Area 1.b., energy audits or assessments are <u>required</u> for each existing building affected to support the estimated energy savings and those reports <u>must</u> be provided as part of the Application as an attachment name Energy Audit or Assessments for Deep Energy Retrofits file (see #9 in the table).

As indicated the last three attachments (items #7, #8 and #9) are <u>only</u> for Topic Area 1, whereas, Item #6 and items #10 through #15 could apply to both Topic Area 1 and Topic Area 2.

- 5) The Design and Engineering File (Item #10) is an Attachment for copies of any hardware performance specifications, warranties, engineering drawings, and any other design or engineering data to supplement the Technical Volume.
- 6) Any supplemental data to support the economic analysis including <u>as a minimum</u>, a cash flow analysis (unless included as part of the Technical Volume) and copies of actual utility or fuel bills (one for each season) should be included in the Economics File attachment (Item #11 in the Table).
- 7) We've already discussed Statement of Commitment and Cost Sharing. However, be aware that Statements of Commitment by the Applicant **must not only** authorize the submittal of the application and be specific to this FOA, but must also include:
 - 1) A commitment to the proposed project;
- 2) A description of building(s) and/or land proposed for use as part of the proposed project;
- 3) Identify whether the building(s) and/or land is held in Trust, held in fee simple (owned) and by whom, or under a long-term lease (at least 20 years) and from whom;

4) If the owner or lease holder is not the eligible entity, a commitment in writing from the building and/or land owner or lease holder authorizing the Applicant's use of those building(s) and/or land for the proposed project must be provided; and

5) If the Applicant will not own or control the project (Topic Area 2 only), a description of the benefits gained under the proposed financing structure should be provided.

Letters of support by anyone not participating in the proposed project are not required or desired, and should not be provided as part of the application. For more, see page 37-38 of the FOA document.

- 8) The Agreements file (Item #13) allows you to supplement the Technical Volume with evidence of any business agreements between the Applicant and participants, including consultant agreements, contractor agreements, and any other agreements, such as interconnection, net metering, lease agreements, and biomass supply agreements, if applicable.
- 9) The Subcontract Plan File (Item #14) is <u>required</u> if project participants (i.e., consultants, contractors, or vendors) have not been identified. The plan should include a description of the selection process to be employed, statement of work, and criteria to be used for selection. The Subcontract Plan may be supplemented by excerpts of the Applicant's procurement policy and procedures document.
- 10) A resume is **required** for each key person proposed (Technical Contact, Business Contact, tribal staff, consultants, subcontractor representatives, etc.) as part of the project. A key person is any individual who contributes in a substantive, measurable way to the execution of the project. **Each resume must not exceed 2 pages.** Save all resumes in a single file for uploading with your application.

Again note that files designated as "Optional" in this table and in EERE Exchange may be actually be necessary to complete your Application and to fully address the merit review criteria.

SUBMISSION	#	COMPONENTS	FILE NAME (IF NECESSARY)
Application (PDF, unless stated otherwise)	19	Cost Share Reduction Request, if applicable (Optional)	ControlNumber_ApplicantName _CostShareReduction
,	20	Financial Statements, if applicable (Required only if a Cost Share Reduction is being requested)	ControlNumber_ApplicantName _FinancialStatements

If a reduction in the cost share from 50% is being requested, a Cost Share Reduction Request file <u>must</u> be submitted with your application. The cost share reduction request <u>must</u> specify the percentage of allowable project costs proposed as cost share (no less than 10%) and include justification and evidence of the applicant's inability to meet a 50% cost share.

An Applicant's cost share reduction request <u>must</u> address all factors and provide all information identified in Section III.B.7, Cost Share Reduction Request. If the cost share reduction request does not address all the factors or provide the information needed to make a determination, the request will not be considered. The reduction request <u>must</u> be signed by an authorized representative of the Applicant.

If a reduction is being requested, "Financial Statements" for the Applicant are also **required**. The financial statements should include a balance sheet, statement of income and retained earnings or statement of activities (listing income and expenses), and cash flows. If the requisite financial statements are not submitted, the Applicant will not be considered for a cost share reduction.

Please refer to pages 19-20 of the FOA document for more on the Cost Share Reduction Request.

And again, if you choose to submit an application, this table found on pages 24-25 of the FOA is recommended to be used as a checklist in preparing and in uploading your application.

Next slide, please. Thank you.

Application Eligibility Requirements

- Applicants must submit an Application by December 10, 2015
 5:00 PM Eastern Time
- Applications are eligible for review if:
 - o The Applicant is an eligible entity (Section III.A of FOA);
 - o The Cost Share requirement is satisfied Section III.B of FOA;
 - o The Application is compliant Section III.C of FOA; and
 - o The proposed project is responsive to the FOA Section III.D of FOA
 - The Application meets any other eligibility requirements listed in Section III of the FOA.
- DOE will <u>not</u> make eligibility determinations for potential Applicants <u>prior to</u> the date on which Applications to this FOA must be submitted. The decision whether to submit an Application in response to this FOA lies <u>solely</u> with the Applicant.



As we previously pointed out, applicants must submit applications no later than 5:00 Eastern Time on December 10, 2015. DOE will conduct an eligibility review, and an application will be deemed eligible if:

- 1) The Applicant is an eligible entity. Refer to Section III.A of FOA (Pages 13-15). Specifically, eligibility for award under this Funding Opportunity Announcement is restricted to: (1) an Indian Tribe; or (2) Tribal Energy Resource Development Organization; and on whose (4) Indian Lands the project(s) will be located. If an application is being submitted on behalf of an Indian Tribe, by a (1) Tribal Consortium; (2) Tribal Organization; or (3) Inter-Tribal Organization, the requirements on page 14 and 15 of the FOA must be met.
- 2) Another eligibility requirement is Cost Share (see Section III.B of FOA). The required cost share <u>must</u> be at least 50% (100% match against EERE funds) of the total allowable costs of the project, <u>unless</u> an Applicant request for reduced cost share is received and approved by DOE (see Cost Share Reduction Request in Section III. B.7 of the FOA document, pages 19-20);
- 3) The Application is eligible if compliant with Section III.C of FOA. Specifically, the Applications are deemed compliant if: (1) The Application complies with the content and form requirements in Section IV.C of the FOA; and (2) The Applicant successfully uploaded

all required documents and clicked the "Submit" button in EERE Exchange by the deadline.

4) The proposed project is responsive to the FOA Section III.D of FOA (Page 21). Specifically, any "Applications Specifically Not of Interest," as described in Section I.B of the FOA (Page 11), are deemed nonresponsive and are not reviewed or considered.;

And

5) The Application meets any other eligibility requirements listed in Section III of the FOA.

Please be aware that DOE will <u>not</u> make eligibility determinations prior to the date on which Applications are due. The decision whether to submit an Application in response to this FOA lies <u>solely</u> with the Applicant.

Multiple Applications

- Applicants may submit <u>more than</u> one application to this FOA or under a Topic Area, provided that each application is for a unique and distinct project. One application must be provided for each specific project.
- Submittals under different Topic Areas cannot be combined under one application, except as noted under Topic Area
 1.b. where facility-scale clean energy systems may be combined with energy efficiency measures.
- Each Application <u>must</u> have a distinct title and be readily distinguishable.



READ SLIDE

Next slide. Thank you.

Merit Review and Selection Process

- The Merit Review process consists of multiple phases that each include an initial eligibility review and a thorough technical review.
- Rigorous technical reviews are conducted by reviewers that are experts in the subject matter of the FOA.
- Ultimately, the Selection Official considers the recommendations of the reviewers, along with other considerations such as program policy factors, to make the selection decisions.



READ SLIDE

Next.

Technical Merit Review Criteria

The sub-criteria under each criterion are of equal weight, unless otherwise specified.

Criterion 1: Goals and Objectives (10%)

- Clarity and completeness Executive Summary including the following:
 - Concise overview of the proposed project;
 - Description of the Indian Tribe or Tribal Energy Resource Development Organization, and if applicable a description of the Tribal Consortium, or Tribal or Inter-tribal
 Organization submitting the application on behalf of the Indian Tribe, including the
 - · long-term energy goals or vision,
 - organizational structure, and
 - demographics.;

and.

- Discussion of the project goals and objectives, and how the project integrates into the long-term goals of the Applicant
- Extent to which the proposed project provides economic (e.g., money saved, jobs, etc.) and environmental benefits (e.g., reduction of fossil fuel, less emissions, etc.) to the Indian Tribe(s) or tribal community.
- Soundness of the discussion of the need for an impact of DOE funding to the proposed project and implications if not funded.



Applications will be evaluated against the following merit review criteria.

The goals and objectives of the Technical Volume (or Criteria 1) are worth 10% of the total score and include:

- (1) Clarity and completeness of the Executive Summary,
- (2) The extent to which the proposed project provides economic and environmental benefits, and the
- (3) Soundness of the discussion that justifies the need for and impacts of DOE funding.

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Criterion 2: Project Description and Outcomes (40%)

- Clarity and completeness of the detailed project description
- Technical viability of the proposed project, including
 - o Adequacy of the
 - 1) Available renewable energy resource(s); and/or
 - 2) Energy audit(s) or assessment(s);
 - Viability of the
 - 1) Design and availability of commercially-proven clean energy technologies; and/or
 - 2) Energy efficiency measures and completeness of the materials or equipment list(s).
 - Reasonableness of the methodology to be used to install renewable energy system(s), combined heat and power system(s), or implement energy efficiency measure(s);
 - Clarity and completeness of the discussion of barriers that could impede the project and reasonableness of the plan to overcome those barriers;
 - Reasonableness of the plan to verify the energy displacement or reduction in total energy from all sources (amount, cost, and percentage); and
 - o Reasonableness of the operation and maintenance plan.
- · Economic viability of the proposed project, including
 - o Quality of the economic assessment;
 - o Reasonableness of the payback period; and
 - o Financial sustainability of the proposed project.



Criterion 2 or the "Project Description and Outcomes" is weighted at 40%, and includes, the clarity and completeness of the detailed project description, and the technical and economic viability of the proposed project.

I'll give you a moment to review the sub-criterion.

PAUSE.

Next slide. Thanks.

Criterion 2: Project Description and Outcomes (40%) - Continued

- · Outcomes, including:
 - o Amount of energy generated or saved;
 - o Economic benefits (e.g., money saved, people trained, jobs created);
 - o Environmental benefits (reduction in greenhouse gases and the equivalency); and
 - Other outcomes (e.g., replicability, environmental stewardship, helps meet a specific energy goal, step towards energy independence).



In addition to the Project Description, Criterion 2 also includes Outcomes including the sub-criterion as shown.

PAUSE.

Next slide.

Criterion 3: Roles, Responsibilities, Resources, Capabilities and Commitment (30%)

- Soundness of the project management approach, including:
 - o Organizational and individual roles and responsibilities;
 - Organizational relationships as evidence by existing business or other agreements, such as interconnection, net metering, or lease agreements, if applicable.
 - Capabilities of the Applicant and participants to comprehensively address all aspects
 of the proposed project or the reasonableness of the plan to obtain qualified
 consultants, contractors, or vendors.
- Demonstrated level of commitment of the Applicant and each participating organization as evidenced by:
 - (1) Past actions; and,
 - (2) Commitments to the proposed project.



Criterion 3 is weighted at 30% and includes the soundness of the project management concept and the level of commitment.

I'll give you a moment to review the sub-criterion.

Pause.

Criterion 4: Workplan (20%)

- Clarity and completeness of the narrative description of each activity necessary to complete the project; and
- Likelihood of achieving project objectives through logical task structure.



The final criterion is the Workplan which is weighted at 20%. Remember, Appendix D of the FOA includes the Workplan content and format. Note that the format can be copied from Appendix D and used to prepare a Microsoft Word file to be submitted as part of your application.

The Workplan should include, the:

- (1) Project Objectives;
- (2) Project Summary;
- (3) Tasks To Be Performed;
- (4) Project Management;
- (5) Reporting; and
- (6) Project Schedule and Milestones, in the form of a milestone summary table. Examples of milestone summary tables are also provided as part of Appendix D.

Next slide, please. Thank you.

Selection Factors

The Selection Official may consider the merit review recommendation, program policy factors, and the amount of funds available in arriving at selections for this FOA



Next, on to Section Factors. READ SLIDE.

Program Policy Factors

In addition to the Technical Merit Review Criteria, the Selection Official may consider the following program policy factors in determining which Applications to select for award negotiations:

- The degree to which the proposed project, including proposed cost share, optimizes the use of available DOE funding to achieve programmatic objectives;
- Geographic or technology diversity;
- Whether the proposed project is likely to lead to increased employment or increase manufacturing in the United States;
- Whether the proposed project will advance the goals of the Climate
 Action Champion program, as committed to by the designated
 Champion pursuant to its designation agreement. The Climate Action
 Champion program goals include improving climate resilience and
 reducing greenhouse gas emissions.



After the Merit Review process, the Selection Official may consider the program policy factors shown here to come to a final selection decision. The Program Policy Factors are included here and on page 49 of the FOA.

I'll give you a moment for you to read through the Program Policy Factors.

PAUSE.

Additional information on the Climate Action Champion initiative program policy factor (bullet 4) can be found on pages 49 and 50 of the FOA.

Registration Requirements

- To apply to this FOA, Applicants <u>must</u> register with and submit application materials through EERE Exchange: https://eere-Exchange.energy.gov.
- A control number will be assigned while registering in EERE Exchange.
 Retain this number as it will be used as an identifier and required on all application documents.
- Although not required to submit an Application, the following registrations must be complete to received an award under this FOA:

Registration Requirement	Website
DUNS Number	http://fedgov.dnb.com/webform
SAM	https://www.sam.gov
FedConnect	https://www.fedconnect.net
Grants.gov	http://www.grants.gov



RFAD first two bullets.

The EERE Exchange registration does not have a delay; however the **remaining registration requirements in the table could take several weeks to process and are necessary for a potential Applicant to receive an award under this FOA**. Therefore, although not required in order to submit an application through the EERE Exchange site, all potential Applicants lacking a DUNS number, or not yet registered with SAM or FedConnect should complete those registrations as soon as possible.

DUNS Number

Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number through the website link shown.

SAM (System for Award Management)

Register with the System for Award Management system. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. SAM registration <u>must</u> be updated annually.

FedConnect

Register in FedConnect. To create an organization account, your organization's SAM MPIN obtained during the SAM registration is required to register in FedConnect. For more information about the SAM MPIN or other registration requirements, review the "FedConnect Ready, Set, Go! Guide" which can be obtained from the FedConnect site.

Grants.gov

Register in Grants.gov to receive automatic updates when Amendments to this FOA are posted. However, please note that Applications will **not** be accepted through Grants.gov.

For more on these registrations, see page 53 of the FOA document.

Next slide, please. Thank you.

Means of Submission

- Full Applications must be submitted through EERE Exchange at https://eere-Exchange.energy.gov
 - DOE will not review or consider applications submitted through other means
- The Users' Guide for Applying to the Department of Energy Funding Opportunity Announcements can be found at https://eere-Exchange.energy.gov/Manuals.aspx



All required submissions <u>must</u> come through EERE Exchange. DOE will not review or consider applications submitted through any other means.

Please see the *User's Guide for Applying to the Department of Energy Funding Opportunity Announcements* found on EERE Exchange under "Manuals". It is a step-by-step guide including screen shots on how to register and how to submit an application into EERE Exchange. Please note that for this FOA, there are no pre-application documents such as concept papers or letters of intent. Nor will you be able to reply to reviewer comments as reviewer comments will not be provided to applicants until after selections have been made. So, please disregard those sections of the EERRE Exchange User's Guide.

Key Submission Points

- Check entries in EERE Exchange
 - Submissions could be deemed ineligible due to an incorrect entry
- DOE strongly encourages Applicants to submit applications 1-2 days <u>prior to the deadline</u> to allow for full upload of application documents and to avoid any potential technical glitches with EERE Exchange.
- Make sure you hit the submit button
 - Any changes made after you hit the submit button will un-submit your application and you will need to hit the submit button again
- For your records, print out the EERE Exchange Confirmation page at each step, which contains the application's Control Number.



Key Submission Points. READ SLIDE

Applicants that experience issues with submission PRIOR to the FOA deadline should contact the Exchange helpdesk for assistance (EERE-ExchangeSupport@hq.doe.gov). The Exchange helpdesk and/or the EERE Exchange system administrators will assist Applicants in resolving issues. The Office of Indian Energy is <u>not</u> able to assist with technical issues associated with EERE Exchange or the submittal of an application.

Applicants that experience issues with submissions that result in late submissions, should also contact the Exchange helpdesk for assistance. The Exchange helpdesk and/or the EERE Exchange system administrators who may be able to assist (including possibly finalizing submission on behalf of and with the Applicant's concurrence). It is recommended, however, that you keep records and/or documentation (including screen shots) of any issues you experience in submitting your application.

PLEASE NOTE, however, that those Applicants who are unable to submit their application due to their waiting until the last minute when network traffic is at its heaviest to submit their materials, will **not** be able to use this process.

Next slide.

Applicant Points-of-Contact

- Applicants must designate primary and backup points-ofcontact in EERE Exchange with whom DOE will communicate to conduct award negotiations
- It is imperative that the Applicant/Selectee be responsive during award negotiations and meet negotiation deadlines
 - Failure to do so may result in cancellation of further award negotiations and rescission of the Selection



READ BULLET #1. Remember these are the contacts that will be used to notify applicants of whether their applications was deemed non-responsive, non-compliant, unsuccessful, or selected for negotiation of an award.

Read bullet #2.

Next slide.

Questions

- Questions about this FOA?
 - o Email <u>tribal@ee.doe.gov</u>
 - All Q&As related to this FOA will be posted on the EERE Exchange website
 - DOE will attempt to respond to questions within 3 business days, unless a similar Q&A has already been posted on the website.
 - You will be notified via email when a response to you question has been posted.



READ SLIDE

Next. Thanks.

Questions

- Problems logging into EERE Exchange or uploading and submitting application documents with EERE Exchange?
 - o Email EERE- ExchangeSupport@hq.doe.gov.
 - o Include FOA name and number in subject line
- We will <u>not</u> entertain questions during this webinar. So, please capture any questions you may have and send those via email to tribal@ee.doe.gov.



READ SLIDE

For those of you who are only interested in community-scale projects and not be staying for this part of the webinar, I want to thank you for your interest and your attention.

Hopefully, we've answered some of your questions and provided an overview of the FOA and the process. However, if you have any questions, please send us an email to tribal@ee.doe.gov. We look forward to seeing all your project ideas as part of your applications and hopefully working with you in the future. Thank you.

Next slide.

Energy Savings Calculations (Topic Area 1 Only)

- Under Topic Area 1, Tribal Building Clean Energy and Energy
 Efficiency Retrofits, there are specific requirements for displacing
 an energy source or sources (Topic Area 1.a., Clean Energy
 Systems) or reducing the total of <u>all</u> energy sources (Topic Area
 1.b, "Deep Energy Retrofit" Energy Efficiency Measures).
- The percentage of energy saved will be independently verified; therefore, the methodology described in Appendix C of the FOA must be used.
- Appendix C includes instructions on how to calculate the energy saved, the conversion factors that <u>must</u> be used, and various examples.
- A Microsoft Excel template has been provided in EERE Exchange for calculating the amount of energy saved.



READ SLIDE.

And now I am going to turn the presentation over to Dan Olis and Caleb Rockenbaugh, both who work under the analysis group at DOE's National Renewable Energy Laboratory (or NREL). They are now going to describe the methodology documented in Appendix C of the FOA, and demonstrate how to use the Energy Saved Template provided to help you calculate the energy displacement for Topic Area 1.a or the total of <u>all</u> energy saved for Topic Area 1.b.

Remember, these calculations are <u>only</u> required for Topic Area 1, <u>not</u> Topic Area 2 (Community-Scale Clean Energy Deployment).

Next slide, please. Thank you.

I am now turning the presentation over to Dan Olis who will present the methodology from Appendix C of the FOA, followed by Caleb who will demonstrate the Excel Energy Savings Template. Dan.......

 Per Appendix C, energy savings is the difference between the total energy usage before the project and the projected energy usage after the project. The equation for calculating the percentage of energy savings is shown in the equation below.

Equation 1

Savings (%) = $\frac{\text{Energy usage before project (kBtu)} - \text{Energy usage projected after project (kBtu)}}{\text{Energy usage before project (kBtu)}} \times 100$

 To simplify the analysis and to provide an equivalent basis of comparison, <u>all</u> Applicants <u>must</u> use a common set of conversion factors (see Table 1).



Thank you, Lizana. First we are going to discuss the methodology in Appendix C of the FOA and then demo the Template.

Note that these calculations are only required for Topic Area 1, not Topic Area 2. No calculations are required for Topic Area 2.

READ SLIDE

Next slide.

Table 1. Conversion Factors to thousands of Btu (kBtu) and Source

Energy¹

	950000	23	22	
To convert to kBtu from:	Input units	Conversion to kBtu*	Conversion to Source Energy	Multiply by:
Electricity	kWh	3.412	3.14	10.7
Natural Gas	Therms	100	1.05	105
Natural Gas	100 cubic feet (CCF)	1 102.8		107.1
Diesel,	Gallons	138	1.01	139.4
Fuel Oil (No. 1)	Gallons	139	1.01	140.4
Fuel Oil (No. 2)	Gallons	138	1.01	139.4
Fuel Oil (No. 4)	Gallons	146	1.01	147.5
Fuel Oil (No. 5 & 6)	Gallons	150	1.01	151.5
Kerosene	Gallons	135	1.01	136.4
Propane and liquid Propane	Gallons	91.0	1.01	91.9
Propane and Liquid Propane	cubic feet (CF)	0.68	1.01	0.69
Coal	lb	12.5	1.00	12.5
Coal	Ton	25,000	1.00	25,000
Steam	lbs	1.194	1.20	1.21
Steam	1000 lbs	1,194	1.20	1,432.8
Chilled Water	Ton-hours	12	1.00	12
Any Fuel	million Btu (or MMBtu)	0.001	Use above	



Shown here and as Table 1 in Appendix C of the FOA are the conversion factors that **must** be used in your calculations. The common conversion factors (multipliers in Table 1) not only convert energy values to a common unit (kBtu), but also account for the effects of inefficiencies in energy conversion and distribution by converting site energy to *source energy*.

Source energy is the most equitable unit of evaluation, and enables assessment of energy efficiency. Source energy traces the heat and electricity requirements of the building back to the raw fuel input, thereby accounting for any losses and enabling a complete thermodynamic assessment. For more, see the Energy Protection Agency (EPA) Energy Star website or Portfolio Manager Technical Reference on Source Energy.

These conversion factors are built into the Energy Savings Template and can be found in Appendix C of the FOA.

Methodology:

The general process for calculating energy savings is as follows:

- 1) Identify the energy source(s)
 - a) For Topic Area 1.a (Clean Energy Systems), identify the energy source or sources (e.g., electricity, heating oil, diesel oil, natural gas, or any other energy source or fuel used for electricity production, heating and/or cooling) that are being displaced by the proposed clean energy system.
 - b) For Topic Area 1.b. (Deep Energy Retrofit Energy Efficiency Measures), identify <u>all</u> of the sources of energy (e.g., electricity, propane, heating oil, diesel oil, natural gas, or any other energy source or fuel used for electricity production, heating and/or cooling) that are used by the building or buildings.
- Establish a baseline of the energy currently used by the building or group of buildings (referred to as "energy usage before project" in Equation 1).



READ SLIDE.

So for Topic Area 1.a., the calculation requires you to identify and quantify only the baseline and energy savings that the Clean Energy System will displace. For example, if you are proposing to install a photovoltaic system on a building, then the displaced energy will be electricity. You don't have to include other energy types like natural gas or diesel fuel that the building might consume.

However, for Topic Area 1.b., Deep Energy Retrofit Energy Efficiency Measures, the project needs to displace 20% of <u>all</u> building energy. So you need to identify <u>all</u> electricity, fuels, and other possible energy sources consumed by the building. If you are proposing an energy efficiency project that only saves natural gas, for example, you still need to include electricity plus any other energy sources in your baseline energy total.

Next.

Methodology:

- 3) Determine projected energy usage of the building(s) after the proposed project is completed (referred to as "projected energy usage after project" in Equation 1).
- 4) Convert energy values to the common unit of kBtu using the unit conversion multipliers provided in Table 1 below.
- 5) Sum energy usage values together for the before-project case and sum the energy usage values together for the after-project case.
- 6) Calculate the projected fuel savings using Equation 1.

Equation 1

Savings (%) = $\frac{\text{Energy usage before project (kBtu)} - \text{Energy usage projected after project (kBtu)}}{\text{Energy usage before project (kBtu)}} \times 100$



READ SLIDE

Assumptions:

- Where renewable energy systems, including renewable-fueled combined heat and power systems, are proposed, the "energy usage projected after project" would be reduced by the amount of energy projected to be generated for and used in the building or buildings (i.e., energy displaced by the renewable energy system).
- 2) For purposes of this FOA, all renewable energy system inputs including biomass, are assumed to be zero for calculating the percentage of energy savings; meaning that the "energy usage before project" being replaced by a renewable energy or renewable-fueled system is 100% displaced by the renewable energy or renewable-fueled system.
- 3) If steam and chilled water are generated in the building(s) using energy sources already included in the utility totals (e.g. electricity to generate chilled water), do not double count their usage. If steam or chilled water are purchased separately from a utility provider, their usage needs to be included in the building(s) totals.



READ ASSUMPTIONS 1 AND 2.

Meaning that for renewable energy fuels (such as biomass for example) that might be consumed by the proposed project do not count in the "Energy Usage Projected After Project" total in the energy savings equation. All fuel is displaced (100%).

READ ASSUMPTION 3.

Topic Area 1.a. Clean Energy System Examples

 The following example is used to demonstrate how to apply these factors and calculate the percentage of displaced energy in the building or buildings.

Example #1: Topic Area 1.a. Renewable Power and Heating System

Proposed Project: A 20,000 ft² building is projected to save 20% of its electricity usage using a photovoltaic (solar electric) system projected to produce 68,000 kWh/year, and 100% of its natural gas usage by replacing a natural gas boiler with a biomass-fueled boiler. The total annual energy usage for the building in 2013 was 340,000 kWh/year of electricity, 6,400 therms of natural gas, and 15,000 gallons of fuel oil (No. 5).



Appendix C of the FOA contains 6 step-by-step examples which address a variety of situations. Note that all the examples in Appendix C refer to 2013 as the "baseline" year, whereas for your applications the 12 consecutive months of data should be more recent, such as for 2014 or 2015.

We will go over Example #1 here which is also exemplified on the Energy Savings Template. You may want to follow along in Appendix C.

READ SLIDE

Next slide please. Thank you.

Example #1: Topic Area 1.a. Renewable Power and Heating System

Find: Percentage of energy displaced resulting from the proposed project. *Method:* The general steps described above are followed in this example.

- 1) Identify <u>only</u> the sources of energy that will be displaced by the proposed systems
- 2) Establish the baseline energy usage before the proposed project is implemented.
- 3) Determine projected energy usage after the project.



READ SLIDE

In this example, since the respondent is proposing both a photovoltaic electric system and a biomass heating system, the baseline electricity and natural gas usage must both be used in the energy savings calculation since both energy sources are being displaced. Under Topic Area 1.a, the project needs to displace at least 15% of the <u>total</u> of both electricity and natural gas after being converted to common units of kBtu and combined.

Example #1: Topic Area 1.a. Renewable Power and Heating System

Table 2 shows the building energy usage for this example before and after the proposed project is implemented. The figures in the table are provided in the typical units for these forms of energy, kWh and therms. Note that the electricity usage after the installation of the photovoltaic (solar electric) system is reduced to 272,000 kWh/year or 20% of the 340,000 kWh used before the project, and its natural gas is 100% offset by the biomass-fueled boiler, reducing the therms to be used after the project to 0.

Table 2. Example #1 building energy usage

			%
	Before	After	Savings
Electricity (kWh)	340,000	272,000	20%
Natural Gas (therms)	6,400	0	100%



READ SLIDE

Note: The requirement under Topic Area 1.a. is the displacement of energy; therefore, <u>only</u> the energy sources being displaced are included in the calculation. Since the fuel oil used is not being affected, it is not considered in the calculation.

Example #1: Topic Area 1.a. Renewable Power and Heating Systems

4) Convert the various forms of energy values to the common unit of kBtu using the multipliers provided in Table 1. The energy values with mixed units of kWh and therms are multiplied by the unit conversion factors for the given forms of energy to get the energy values in the common units of kBtu. Note that the biomass boiler is assumed to displace 100% of the natural gas (see Assumption #2 above).

Table 3. Example #1 conversion of energy values from mixed units to common units of kBtu

	Energy Usage (Mixed Units)			Units conversion	Energy Usage (Common Units)		
	Before	After	Units	factor	Before	After	Units
Electricity	340,000	272,000	kWh	10.7	3,638,000	2,910,400	kBtu
Natural Gas	6,400	0	therms	105	672,000	0	kBtu



For Step #4, READ SLIDE

Example #1: Topic Area 1.a. Renewable Power and Heating Systems

5) Sum the energy usage values for the before-project case and sum the energy usage values for the after-project case as shown for this example in Table 4 below.

Table 4. Example #1 summation of before and after project energy usage in common units of kBtu

	Building Energy Usage				
	Before After		Units		
Electricity	3,638,000	2,910,400	kBtu		
Natural Gas	672,000	0	kBtu		
Sum	4,310,000	2,910,400	kBtu		



For Step #5, READ SLIDE

Example #1: Topic Area 1.a. Renewable Power and Heating Systems

6) Calculate the projected percentage of fuel savings using Equation 1.

For this example, the building used 4,310,000 kBtu of energy in 2013. The proposed renewable energy systems are projected to reduce the annual energy usage to 2,910,400 kBtu after the project is implemented. The percent of energy savings is calculated as:

Energy Savings (%) =
$$\frac{4,310,000 \text{ kBtu} - 2,910,400 \text{ kBtu}}{4,310,000 \text{ kBtu}} \times 100 = 32.5\%$$

Note: If under Example #1, a biomass-fueled combined heat and power (CHP) system was used in place of the photovoltaic (solar electric) system and the biomass boiler system (assuming the biomass-fueled CHP system produced the same amount of electricity as the photovoltaic system and heat as the biomass boiler system), the result would be same (32.5% savings).



For Step #6, READ SLIDE

Energy Savings Template Demonstration

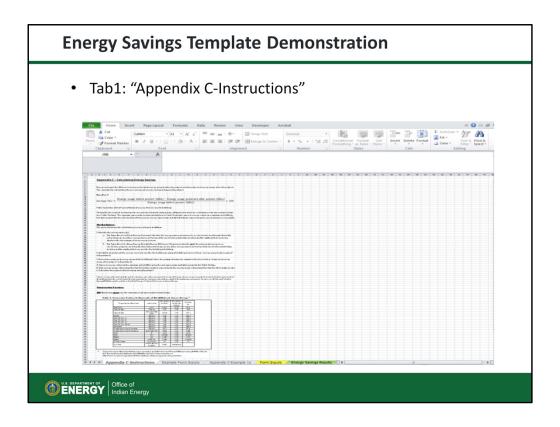
• We'll now provide an overview of the template and move into the live demonstration afterwards.



READ SLIDE

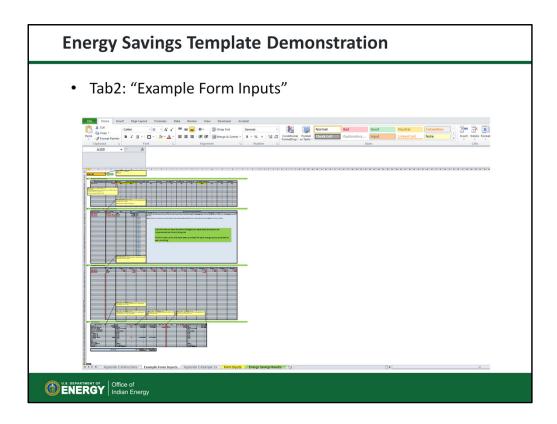
Ahead of the "live demonstration", we'll be looking at each tab of the template. The tabs are located at the bottom of the Microsoft Excel template. Clicking on these tabs will take you to the information contained in each one. As we will discuss, some information in these tabs can be altered while others are "locked" for editing.

Thank you for your attention. I will now turn the presentation over to Caleb Rockenbaugh. Caleb......



Shown here is a screen image of Tab1, labeled "Appendix C-Instructions". This tab provides an overview of the information contained in Appendix C of the FOA and is summarized here for reference. As shown, this tab provides the equation for energy use savings, the methodology for calculating the energy savings for your proposed project, the fuel conversion factors for various fuels, and assumptions used. The conversion factors are embedded into the template and will be calculated automatically based on the information provided. We'll see this during the live demonstration in just a moment.

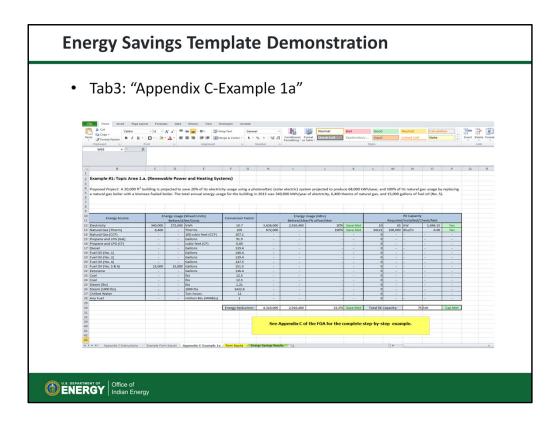
Please note that the images shown are provided as a reference only; that they're not perfectly clear, is OK. We'll go over each in more detail during the demonstration.



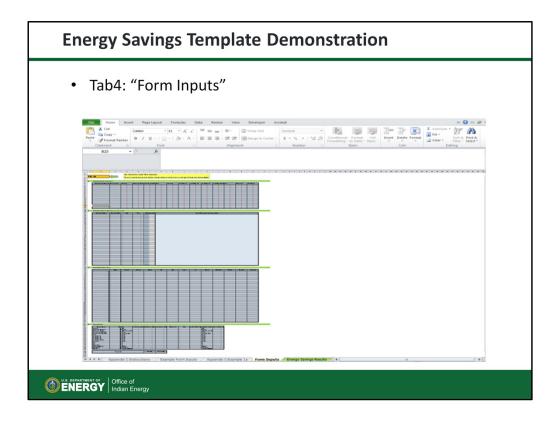
Shown here is a screen image of Tab2, labeled "Example Form Inputs". Along with specific instructions to be used on the "Form Inputs" tab, this tab shows the inputs for Example 1.a.

As we'll discuss in more detail later, this tab provides instructions related to (5) general areas:

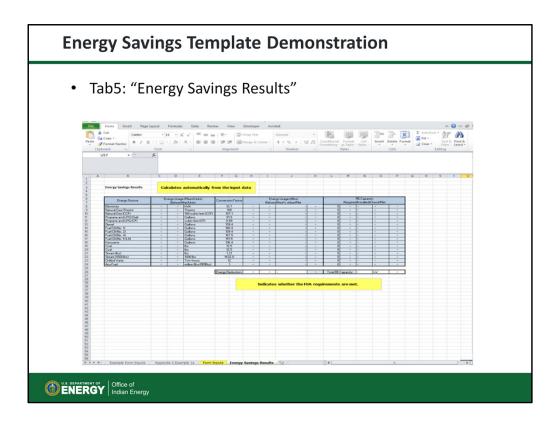
- 1) FOA Being Applied for
- 2) Building/Facility Info and Energy Source Identification
- 3) Monthly Energy Source Information
- 4) Monthly Energy Use Information
- 5) Project Summary and Additional Info



Shown here is a screen image of Tab3, labeled "Appendix C-Example 1a". This tab reflects the results of the inputs from the previous tab where the utility and project information were entered. As shown, this tab not only provides a summary of the information provided in Tab2, but also calculates the energy savings and provides you with feedback of energy use and savings, equipment capacities as well as feedback on whether the project passes the initial screening.



Shown here is an screen image of Tab4, labeled "Form Inputs". This form is to be used for inputting facility and project information related to your specific project. Note that this is a blank of the form shown in Tab2: "Example Form Inputs" and will be used for inputting your data. This is the only tab that you will need to actually input data. The other 4 tabs are instructions, examples, and results and do not require any data input.



Shown here is an screen image of Tab5, labeled "Energy Savings Results". As demonstrated in Tab3: "Appendix C-Example 1a", this tab provides a summary of the information provided in Tab4: "Form Inputs" and provides the you with feedback on your project's energy use, projected energy savings, as well as whether your project meets the requirements of the FOA. No input is required on this tab. All cells are locked.

Note that this information is provided for the applicant's benefit. All FOA applications will be reviewed independent of the feedback provided on the spreadsheet.

And let's move to the next slide...

Energy Savings Template Demonstration

• Please just give us a moment to transfer to the Microsoft Excel File for the demonstration.



READ SLIDE. Remember, this Microsoft Excel template, can be downloaded form EERE Exchange by clicking on "View Required Application Documents" and selecting "Energy Saved Template Topic Area 1 Only" from the document list.

DO DEMONSTRATION.

I hope this helps you using the template and calculating the energy savings. I will now turn the mic back over to Lizana for the closing.

Closing

- Thank you
- Submit questions on the FOA to tribal@ee.doe.gov
- Please download Funding Opportunity Announcement DE-FOA-0001390 ("FOA") and read it thoroughly so you understand all the steps and requirements for submitting an application.
- If you are considering submitting an application, please register in EERE Exchange as soon as possible to obtain a Control Number. This control number must be included on all application documents.
- Check the Frequently Asked Questions (FAQs) on EERE Exchange periodically for any supplemental information or amendments to the FOA.



Thanks Dan and Caleb. Hopefully that will help you use the template and employ the methodology in calculating energy savings for Topic Area 1.

Wow.....a lot of information. I want to thank Dan, Caleb, and Randy for helping me present this information and to thank each of you for your interest, and for joining us today.

A few final comments. READ SLIDE BEGINNING WITH 2ND BULLET

Remember registering in Grants.gov, means you'll receive email notices of any amendments to the FOA.

We are in the process of integrating the Tribal Energy Program website and email list into the Office of Indian Energy's website and email list. However, until then, you may wish to subscribe to the Tribal Energy Program's email list at www.eere.energy.gov/tribalenergy/. By subscribing, you'll receive any information on this funding opportunity, funding opportunities through other agencies, training opportunities, webinars, and other upcoming events. For information on previously funded tribal energy projects, see "Projects" on the website. Also, see "Related Opportunities" under "Financial Opportunities" for a list of open funding opportunities through DOE and other agencies, technical assistance opportunities, and RFPs for clean energy.

These slides and an audio recording of this webinar will be posted in the next week or so. As a registrant of the webinar, you'll be notified when this material is available.

If there are any inconsistencies between the FOA and this presentation or statements from DOE personnel, the FOA is the controlling document and applicants should rely on the FOA language or seek clarification from DOE by sending questions to tribal@ee.doe.gov.

Thank you again for your attention and have a wonderful afternoon. This concludes today's webinar.